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Report to Congressional Requesters

February 2014

MEDICARE

Nurse Anesthetists Billed for Few Chronic Pain Procedures; Implementation of CMS Payment Policy Inconsistent

GAO-14-153

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GAO Highlights

Highlights of GAO-14-153, a report to congressional requesters

Why GAO Did This Study

Chronic pain costs the nation about $600 billion each year, a quarter of which is borne by Medicare. One MAC, Noridian Healthcare Solutions (Noridian), began denying CRNA claims for certain chronic pain services in 2011, citing patient safety concerns. CMS issued a rule, effective January 2013, clarifying that CRNAs can bill Medicare for "any services that a [CRNA] is legally authorized to perform in the state in which the services are furnished," including chronic pain management services. GAO was asked to review Medicare's payment policy regarding the provision of chronic pain management services by CRNAs. This report examines, among other things, (1) trends in Medicare provider billing for selected chronic pain procedures; (2) in which states MACs allowed payment for selected procedures billed by CRNAs as of early 2013; and (3) how MACs implemented the payment policy. To do this, GAO selected seven categories of chronic pain procedures, in consultation with pain care experts. GAO analyzed Medicare claims data from 2009 through 2012, by provider type and geography. To determine which MACs allow CRNA payments and how MACs implemented CMS's policy, GAO interviewed medical directors at all nine MACs.

What GAO Recommends

GAO recommends that CMS provide specific instructions to MACs on (1) how to determine coverage with reference to a state's scope of practice laws, and (2) the application of the CRNA supervision rule. HHS concurred with these recommendations.

View GAO-14-153. For more information, contact James Cosgrove at (202) 512-7114 or cosgrovej@gao.gov.

What GAO Found

From 2009 through 2012, certified registered nurse anesthetists (CRNA)—a type of advanced-practice nurse specializing in anesthesia care—billed Medicare fee-for-service (FFS) for a minimal share of selected chronic pain procedures, less than ½ of 1 percent of these procedures in each year. Physicians without board certification in pain medicine billed for the majority of selected procedures each year, while pain physicians consistently billed for roughly 40 percent of selected procedures. Furthermore, although the number of chronic pain procedures billed by all rural providers increased from 2009 through 2012, the number of procedures billed by rural CRNAs declined over the period. Of all CRNA claims for selected procedures, the share billed by CRNAs in rural areas fell from 66 percent in 2009 to 39 percent in 2012.

Share of Selected Chronic Pain Procedures Billed in Medicare Fee-for-Service (FFS), by Provider Type, 2009 and 2012

	Share of procedures (in percent)	
Provider[a]	**2009**	**2012**
Certified registered nurse anesthetist	0.4%	0.3%
Nurse practitioner or physician assistant	1.0	2.3
Board certified pain physician	40.7	42.5
Other physician	57.9	54.8

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data.

Notes: Percentages may not add to 100 due to rounding.

[a]Provider type is based largely on the specialty indicated on the claim. Where services are billed "incident to," our analysis is based on the billing professional's specialty.

As of early 2013, Medicare Administrative Contractors (MAC)—entities that pay medical claims on behalf of Medicare—allowed payment to CRNAs for all selected procedures in 19 states, allowed payment for a subset of selected procedures in 30 states and the District of Columbia, and denied payments for all selected procedures in 1 state. Where MACs allowed payment to CRNAs for only certain procedures, payment policies indicated substantial variation in the specific allowed procedures.

Three of the nine MACs took steps to implement a Department of Health and Human Services' (HHS) Centers for Medicare & Medicaid Services (CMS) rule, effective January 2013, that defers to state scope of practice laws to inform coverage for CRNAs. CMS relies on MACs to review each state's CRNA scope of practice laws. However, most MACs reported difficulty interpreting state scope of practice laws regarding the services that CRNAs are allowed to provide; MACs noted that state scope of practice laws generally lack detail on which specific services CRNAs can perform. In addition, two MACs assumed that Medicare's rule requiring physician supervision for anesthesia services provided by CRNAs in hospital and ambulatory surgical center settings applied to chronic pain management services provided in all settings; this may have unnecessarily restricted the services for which CRNAs are allowed to bill in certain states.

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Abbreviations

AANA	American Association of Nurse Anesthetists
ABMS	American Board of Medical Specialties
ASA	American Society of Anesthesiologists
ASC	ambulatory surgical center
ASIPP	American Society of Interventional Pain Physicians
CMS	Centers for Medicare & Medicaid Services
CPT	current procedural terminology
CRNA	certified registered nurse anesthetist
E/M	evaluation and management
FFS	fee-for-service
HHS	Department of Health and Human Services
IOM	Institute of Medicine
LCD	local coverage determination
MAC	Medicare Administrative Contractor
NCD	national coverage determination
Noridian	Noridian Healthcare Solutions
NP	nurse practitioner
NPPES	National Plan and Provider Enumeration System
PA	physician assistant

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February 7, 2014

The Honorable Tom Coburn
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable David Vitter
United States Senate

The Honorable Ed Whitfield
House of Representatives

More than 100 million Americans suffer from chronic pain, costing the nation roughly $600 billion each year, a quarter of which is borne by the Medicare program, according to the Institute of Medicine (IOM).[1] Unlike acute pain—which typically has a sudden onset and is expected to last a short time in conjunction with a specific injury or illness—chronic pain lasts more than several months, and may become a disease in itself. In general, chronic pain management may encompass one or multiple therapeutic approaches based on a comprehensive patient assessment made during an evaluation and management (E/M) visit.[2] Such approaches may include prescription medications, such as opioids; physical therapy; and chronic pain procedures, such as epidural steroid injections or nerve blocks. Chronic pain procedures—sometimes referred to as interventional pain management procedures—are minimally invasive, but potentially risky.[3] Most of them involve injections, and many of them occur around the spinal cord. The procedures are typically furnished in hospital outpatient departments, physician offices, or ambulatory surgical centers (ASC).

[1]Institute of Medicine, *Relieving Pain in America: A Blueprint for Transforming Prevention, Care, Education, and Research* (Washington, D.C.: 2011).

[2]E/M services are provided by physicians and nonphysicians to assess patients' health and manage their care.

[3]IOM reported that certain interventional pain procedures may be effective for some patients, but that the usefulness of some interventional procedures may be "doubtful." It also identified a number of shortcomings in the way chronic pain is managed, including insufficient provider education in chronic pain and limited access to care in rural areas.

Recently, the issue of which types of health care providers—pain medicine subspecialists, other types of physicians, or nonphysician providers, such as advanced-practice nurses—should perform chronic pain management services has received heightened attention. Some certified registered nurse anesthetists (CRNA)—a type of advanced-practice nurse specializing in anesthesia care—provide chronic pain services, as well as other services such as those directly related to surgical anesthesia. The American Association of Nurse Anesthetists (AANA) has asserted that CRNAs have demonstrated their ability to safely and effectively deliver chronic pain management services, particularly for patients in rural areas where access to pain physicians is often limited. On the other hand, the American Society of Interventional Pain Physicians (ASIPP) and the American Society of Anesthesiologists (ASA) have argued that CRNAs—and to some extent other physicians without specialized training in pain medicine—are not qualified to comprehensively and independently treat chronic pain patients, and that concerns about access should not trump patient safety.

Under federal law, Medicare-covered services of a CRNA include "anesthesia services and related care."[4] Until recently, it was unclear whether this included chronic pain management services, allowing the Centers for Medicare & Medicaid Services' (CMS) regional Medicare Administrative Contractors (MAC) discretion in determining CRNA coverage.[5] In particular, one MAC—Noridian Healthcare Solutions (Noridian)—began denying CRNA claims for certain chronic pain management services in 2011, citing potential patient safety issues. To clarify the Medicare policy, CMS promulgated a rule that CRNAs can bill Medicare for "those services that a [CRNA] is legally authorized to perform in the state in which the services are furnished," including chronic pain management services, effective January 1, 2013.[6] Contrary to the prior policy, which allowed for MAC discretion, this clarification explicitly defers to each state's scope of practice laws to inform whether particular

[4]42 U.S.C. § 1395x(bb)(1) (codifying section 1861(bb)(1) of the Social Security Act).

[5]MACs are private contractors that assist CMS, an agency within the Department of Health and Human Services (HHS), in administering the Medicare program. They are responsible for reviewing and paying claims in accordance with Medicare policy, conducting provider outreach and education on correct billing practices, helping implement CMS-issued national coverage policy, and developing local coverage policies.

[6]77 Fed. Reg. 68892, 69005-09 (Nov. 16, 2012) (codified at 42 C.F.R. § 410.69).

CRNA services are covered under Medicare.[7] Thus, CMS's rule both sets a Medicare standard for the services that can be reimbursed and recognizes local variation in states' scope of practice laws.

You asked us to review Medicare's payment policy regarding the provision of chronic pain management services by CRNAs. In this report, we (1) examine trends in Medicare provider billing for selected chronic pain procedures, (2) determine the extent to which billing for selected chronic pain procedures changed during the period of Noridian's payment denials for CRNAs, (3) identify states in which MACs allowed payment for selected chronic pain procedures and E/M services billed by CRNAs as of early 2013, and (4) review how MACs implemented the payment policy regarding CRNAs.

To address these issues, we selected seven categories of chronic pain procedures and related current procedural terminology (CPT) codes, in consultation with pain care experts.[8] From an AANA-provided list of procedures billed by CRNAs, we selected procedures that were either reported by a MAC billing specialist as likely to be used to treat chronic pain (as opposed to acute pain), or commonly identified by payer resources as pain management services. For our claims analyses, we excluded other types of chronic pain management services, such as E/M and pharmacological services, because of the unavailability of reliable data. For a description of the selected procedures, see table 1.

[7]Each state has its own scope of practice laws, which typically define a physician or nonphysician provider's practice, qualifications, board representation, and fee/renewal schedule.

[8]CPT is a uniform coding system maintained by the American Medical Association used to identify and bill for medical procedures and services under public and private health insurance programs.

Table 1: Description of Selected Chronic Pain Procedures

Chronic pain procedures	Description
Autonomic nerve blocks	Injections of local anesthetic agents to temporarily interrupt nerves or nerve trunks in order to diagnose or treat pain in the autonomic nervous system, a series of nerves that control several involuntary body movements.
Epidural injections	Injections of steroids (anti-inflammatory agents), local anesthetic agents, or other medication into the epidural space of the spine to diagnose or treat pain radiating to the arms and legs, caused by the irritation of nerves in the spine. Radiological guidance is usually used to ensure correct needle placement.
Facet neurolytic destruction	Destruction of the paravertebral facet joint nerve by a neurolytic agent, such as a chemical or an electric current. Radiological guidance is used to ensure correct needle placement.
Paravertebral facet joint injections	Injections of steroids or local anesthetic agents into spinal joints to treat or diagnose back pain. Radiological guidance is usually used to ensure correct needle placement.
Somatic nerve blocks	Injections of local anesthetic agents to temporarily interrupt nerves or nerve trunks in order to diagnose or treat pain in the somatic nervous system, which includes the nerves that extend to limbs.
Transforaminal epidural injections	Specific type of epidural injection that allows the medication to be delivered into the foramen of the spine, which enables the provider to isolate the precise nerve root causing the pain. Radiological guidance is usually used to ensure correct needle placement.
Trigger point injections	Injections of steroids or local anesthetic agents given to treat one or multiple pain points (myofascial trigger points) in a band of skeletal muscle.

Source: GAO summary of information from medical literature, federal reports, and other sources.

To examine provider billing for the selected procedures, we analyzed Medicare fee-for-service (FFS) paid claims from 2009 through 2012. In addition, we disaggregated the data into four provider types—pain medicine subspecialists (pain physicians), other physicians, CRNAs, and nurse practitioners (NP) or physician assistants (PA)—based largely on the specialty indicated on the claim. For procedures that were billed "incident to"—whereby, for example, a physician might bill for a supervised procedure furnished by a CRNA, NP, or PA—the actual

provider of the service is not indicated on the claim.[9] These claims indicate the specialty of the billing professional. To the extent that providers furnished procedures in whole or in part that were billed "incident to" another professional, our analysis may have understated the role of those provider types. To identify procedures billed by pain physicians, we cross-referenced the names of physicians listed by the American Board of Medical Specialties (ABMS) as board certified in pain medicine, to a list of all Medicare providers, as maintained by CMS through the National Plan and Provider Enumeration System (NPPES).[10] We also disaggregated the data by provider location, including rural and urban status.

We took additional steps in an effort to narrow our focus to procedures used to treat chronic pain. CPT codes do not indicate whether a particular procedure is used to treat chronic or acute pain. To focus our review on chronic pain, we excluded claims with a modifier that suggests that the service was likely to be peri-operative. We also excluded procedures performed in the hospital inpatient setting in our trend analysis, as they are also more likely to be acute in nature.

To determine the extent to which billing for the selected procedures changed during the period of MAC denials, we analyzed claims from 2009 through 2012 in those states under Noridian's jurisdiction where CRNAs had at least 1 percent of the chronic pain provider market in the period before their claims were denied. We examined trends in the billing of our selected chronic pain procedures by all provider types, both statewide and in rural areas. Appendix I contains a more complete description of our methodology for the Medicare claims analyses.

[9]Providers sometimes use modifiers to provide additional information on the claim about a service or procedure submitted to CMS. In 2009, the HHS Office of Inspector General recommended that CMS create a modifier that can be used to identify services billed "incident to." CMS disagreed, citing difficulties distinguishing between services personally performed and those not personally performed. See HHS Office of Inspector General, *Prevalence and Qualifications of Nonphysicians Who Performed Medicare Physician Services*, OEI-09-06-00430 (Washington, D.C.: August 2009). In December 2013, CMS amended Medicare regulations to stipulate that services and supplies billed "incident to" a physician's professional services can only be furnished by auxiliary personnel who "meet[ ] any applicable requirements to provide the services, including licensure, imposed by the State in which the services are being furnished." See 78 Fed. Reg. 74230 (Dec. 10, 2013) (to be codified at 42 C.F.R. § 410.26).

[10]Using this methodology, we were able to match 91 percent of the physicians listed as pain specialists by ABMS to the list of providers enrolled in the Medicare program.

To identify states in which MACs allow payment for selected chronic pain procedures and E/M services billed by CRNAs, we interviewed medical directors at all nine Part A and Part B MACs to determine whether the MAC pays for all, a subset, or no chronic pain procedures and outpatient E/M services.[11] We then confirmed this information by obtaining coverage policies for specific CPT codes for each state under a MAC's jurisdiction. To review how MACs implemented CMS's 2013 payment policy, we interviewed CMS officials to learn about the development and implementation of the new rule, as well as medical directors from the nine MACs to determine each MAC's approach to implementing this policy.

We ensured the reliability of the Medicare claims data, ABMS pain physician data, and NPPES data used in this report by performing appropriate electronic data checks, reviewing relevant documentation, and interviewing officials and representatives knowledgeable about the data. We found the data were sufficiently reliable for the purpose of our analyses.

We conducted this performance audit from March 2013 through February 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Types of Providers and Practice Requirements

Various types of providers may perform chronic pain management procedures, and each provider type is subject to certain education, training, certification, and licensure requirements. The range of chronic pain management providers and their practice requirements include the following:

[11]CMS is in the process of reorganizing and consolidating its MAC jurisdictions. We spoke with the MACs that process claims for Medicare Part A—covering hospital and other inpatient stays—and Medicare Part B—covering hospital outpatient, physician, and other services. As of April 2013, there were 12 jurisdictions and 3 states under legacy contracts; 9 MACs held the contracts for these jurisdictions.

- *Pain physicians*. These physicians have completed a subspecialty fellowship training program in pain medicine recognized by ABMS.[12] Following medical school and a residency program in a primary specialty, pain physician candidates must complete an accredited 1-year fellowship and pass an examination to receive board certification.
- *Other physicians*. Physicians—including those in specialty and primary care—without certification in pain medicine have comprehensive medical knowledge through their medical school, as well as residency training that can last from at least 3 to 7 years. Although board certification is optional, most physicians take an exam to become certified in a medical specialty.
- *CRNAs*. According to the AANA, registered nurses with a Bachelor of Science in Nursing and at least 1 year of experience in an acute setting can pursue certification in nurse anesthesia. Graduates of accredited schools of nurse anesthesia, which provide 24 to 36 months of training, must pass a national examination to receive their certification as CRNAs.
- *Other nonphysician providers, such as NPs or PAs*. To become NPs, registered nurses undertake advanced clinical training and complete a master's program—lasting 1½ to 3 years—or a doctoral program. PAs typically undertake roughly 2 years of master's-level training. Both NPs and PAs must be nationally certified.

Providers must be licensed by the states in which they practice and adhere to state requirements. Physician and PA licensure is administered by state boards of medicine, while nursing licensure is administered by state boards of nursing. Furthermore, all providers are governed by state laws. For example, NPs may or may not be allowed to practice independently or prescribe medications depending on the state in which they practice, and PAs are generally allowed to prescribe medications, but must practice under the supervision of a physician. These laws can

[12]The American Board of Pain Medicine also offers physicians certification in pain medicine. However, because it is not an ABMS member board, physicians receiving its certificate are not considered board certified in pain medicine, except for in California and Florida. In addition, the American Board of Interventional Pain Physicians offers physicians who are already board certified in an ABMS primary specialty the opportunity to become certified in interventional pain management through an examination; it is also not an ABMS member board.

take precedence over other location- or payer-specific policies, such as hospital-based privileging.[13]

Medicare Coverage and Payment for Chronic Pain Procedures

Although CMS has not issued a national coverage determination (NCD) for chronic pain management, some MACs have established local coverage determinations (LCD) for chronic pain procedures.[14] Typically, these LCDs do not address which types of providers may bill Medicare for the services, but rather stipulate certain coverage or billing rules.[15] For example, for procedures that may be given to a beneficiary in a series, an LCD may limit payment to no more than three procedures within a year. LCDs also contain instructions for providers on how to bill Medicare using various CPT codes and modifiers. A given procedure may have several CPT codes that indicate where on the body the procedure takes place or whether additional levels of a procedure were performed. For instance, paravertebral facet joint injections would be billed using one CPT code to indicate a cervical or thoracic location, and another CPT code to indicate a lumbar or sacral location—as well as "add-on" codes to specify when injections occurred on multiple levels of the spine.

CMS uses a physician fee schedule to determine the amounts paid to providers for each CPT code billed. Nonphysician providers of chronic pain procedures vary in the percentage of the physician fee schedule they receive. For example, while CRNAs are generally paid 100 percent of the amount a physician is paid for a given procedure under the physician fee schedule, NPs and PAs are generally paid 85 percent of the physician fee schedule.[16]

[13]Privileging is the process whereby a health care facility grants health care providers permission to furnish specific services at their facility.

[14]NCDs stipulate coverage rules for the items and services that are reasonable and necessary for the diagnosis or treatment of an illness or injury. In the absence of an NCD, an item or service may be covered at a MAC's discretion. In this case, a MAC may issue an LCD stipulating the coverage and coding rules that it uses to adjudicate claims for such items and services. Most coverage decisions consist of LCDs, while there are relatively few NCDs.

[15]CMS does not generally specify which types of physicians can bill for which procedures.

[16]For most physician services, the beneficiary is responsible for the deductible, if not already met, and a coinsurance of 20 percent of the physician fee schedule. Medicare pays the remaining 80 percent of the physician fee schedule.

CRNAs Billed for Few Selected Chronic Pain Procedures, Most of Which Were in Rural Areas

From 2009 through 2012, CRNAs billed Medicare FFS for a small share of our selected chronic pain procedures, while pain physicians and other physicians billed for the largest shares. Of the procedures billed by CRNAs, most were billed by CRNAs in rural areas until 2012.[17]

CRNAs Billed for a Consistently Small Share of Selected Procedures, While Pain Physicians Billed for about 40 Percent of the Procedures Yearly

Overall, the various providers' shares of chronic pain procedures billed to Medicare did not change much over the study period. (See table 2.) The share billed by NPs, PAs, and CRNAs combined grew from 1.4 to 2.6 percent, with CRNA's billing for less than ½ of 1 percent of all chronic pain procedures in each year. Pain physicians billed for over 40 percent of the selected procedures over the 4-year period, while other physicians billed for over half of the selected services each year. From 2009 through 2012, the trends in shares of Medicare payments by provider type were largely parallel to the trends in their shares of procedures billed. (See table 2.) Combined, CRNAs, NPs and PAs, received less than 3 percent of all payments for these services throughout the period.

[17]For information on general billing trends by selected procedure, see app. II.

Table 2: Shares of Selected Chronic Pain Procedures and Provider Payments in Medicare Fee-for-Service (FFS), by Provider Type, 2009 through 2012

Numbers in percent

	Share of procedures				Share of payments			
Provider[a]	**2009**	**2010**	**2011**	**2012**	**2009**	**2010**	**2011**	**2012**
Certified registered nurse anesthetist (CRNA)	0.4%	0.4%	0.3%	0.3%	0.2%	0.3%	0.2%	0.3%
Nurse practitioner (NP) or physician assistant (PA)	1.0	1.3	1.7	2.3	0.7	0.9	1.2	1.9
Other physician	57.9	56.1	55.3	54.8	56.5	55.0	54.5	53.9
Pain physician[b]	40.7	42.2	42.7	42.5	42.5	43.9	44.1	43.8

Source: GAO analysis of CMS data.

Notes: Percentages may not add to 100 due to rounding.

[a]Provider type is based largely on the specialty indicated on the claim. Because services billed "incident to" indicate the specialty of the billing professional, our analysis is based on the billing specialty. To the extent that CRNAs, for example, provided services in whole or in part that were billed "incident to" another professional, these data may understate the role of CRNAs in the provision of these procedures.

[b]To identify procedures billed by pain physicians, we cross-referenced the names of physicians listed by the American Board of Medical Specialties (ABMS) as board certified in pain medicine to a list of all Medicare providers.

The pattern of CRNA billing by type of chronic pain procedure shows that CRNAs consistently billed for less than 1 percent of the total. (See table 3.)

- CRNAs had their largest market share in epidural injections, where they accounted for 0.9 percent of providers' billings in 2009; this share dropped to 0.6 percent in 2012.
- CRNAs billed for even smaller shares of facet neurolytic destruction injections, autonomic nerve blocks, and trigger point injections.

Table 3: Certified Registered Nurse Anesthetist (CRNA) Market Share for Selected Chronic Pain Procedures in Medicare Fee-for-Service (FFS), 2009 through 2012

Numbers in percent				
	Share billed by certified registered nurse anesthetists			
Selected chronic pain procedures	**2009**	**2010**	**2011**	**2012**
Autonomic nerve blocks	0.05%	0.10%	0.09%	0.10%
Epidural injections	0.91	0.93	0.79	0.64
Facet neurolytic destruction	0.02	0.03	0.02	0.08
Paravertebral facet joint injections	0.21	0.15	0.16	0.42
Somatic nerve blocks	0.35	0.48	0.39	0.35
Transforaminal injections	0.15	0.18	0.14	0.13
Trigger point injections	0.07	0.11	0.09	0.11

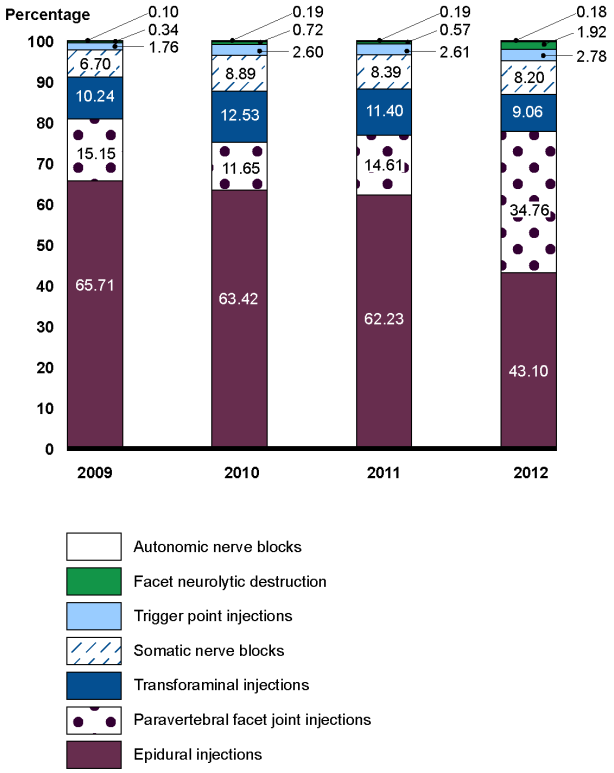
Source: GAO analysis of CMS data.

Notes: The CRNA provider type is based on the specialty indicated on the claim. Because services billed “incident to” indicate the specialty of the billing professional, our analysis is based on the billing specialty. To the extent that CRNAs provided services in whole or in part that were billed “incident to” another professional, these data may understate the role of CRNAs in the provision of these procedures.

Over time, the mix of procedures that CRNAs billed to Medicare from 2009 through 2012 changed somewhat. (See fig.1.)

- Epidural injections represented the largest share—roughly two-thirds—of CRNA-billed procedures, but that share decreased to less than half over the period.
- The share of paravertebral facet joint injections doubled between 2011 and 2012.
- Autonomic nerve blocks, facet neurolytic destruction, and trigger point injections billed by CRNAs held relatively small but growing shares of CRNA billing.

Figure 1: Change in the Mix of Selected Chronic Pain Procedures Billed by Certified Registered Nurse Anesthetists (CRNA) in Medicare Fee-for-Service (FFS), 2009 through 2012



Source: GAO analysis of CMS data.

Notes: The CRNA provider type is based on the specialty indicated on the claim. Because services billed "incident to" indicate the specialty of the billing professional, our analysis is based on the billing specialty. To the extent that CRNAs provided services in whole or in part that were billed "incident to" another professional, they are not captured in this figure.

By state, the trend among CRNAs' billing for selected chronic pain procedures was largely stable over the 4-year period. (See app. III for state-by-state data.)

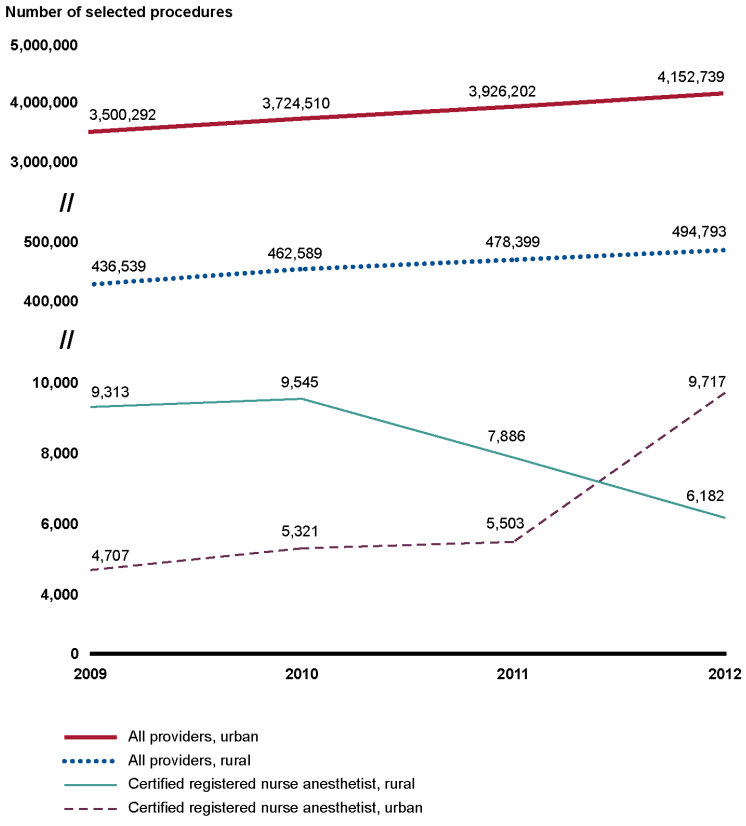
- CRNAs' share increased by more than 1 percentage point in 2 states, declined by more than 1 percentage point in 6 states, and remained largely unchanged in 42 states and the District of Columbia.
- States that experienced the most growth in CRNA market share were New Hampshire and Tennessee, increasing 4.4 and 2.5 percentage points, respectively.

- By 2012, the CRNA share of selected chronic pain procedures was highest in New Hampshire (5.5 percent), Iowa (4.3 percent), and Kansas (4.0 percent). In 43 states and the District of Columbia, the CRNA share remained under 1 percent.

Of All CRNA-Billed Chronic Pain Procedures from 2009 through 2011, Most Were Rural; In 2012, Urban CRNAs Were Dominant

Although the number of selected chronic pain procedures billed by all rural providers increased somewhat from 2009 through 2012, the number of procedures billed by CRNAs in rural areas declined over the period. (See fig. 2.) Of all CRNA claims for selected procedures, the share submitted by providers in rural areas fell from 66 percent in 2009 to 39 percent in 2012; meanwhile, the share of selected procedures nationwide billed by all rural provider types was roughly 11 percent in both 2009 and in 2012.

Figure 2: Number of Selected Chronic Pain Procedures Billed by All Providers and by Certified Registered Nurse Anesthetists (CRNA) in Urban and in Rural Areas in Medicare Fee-for-Service (FFS) from 2009 through 2012



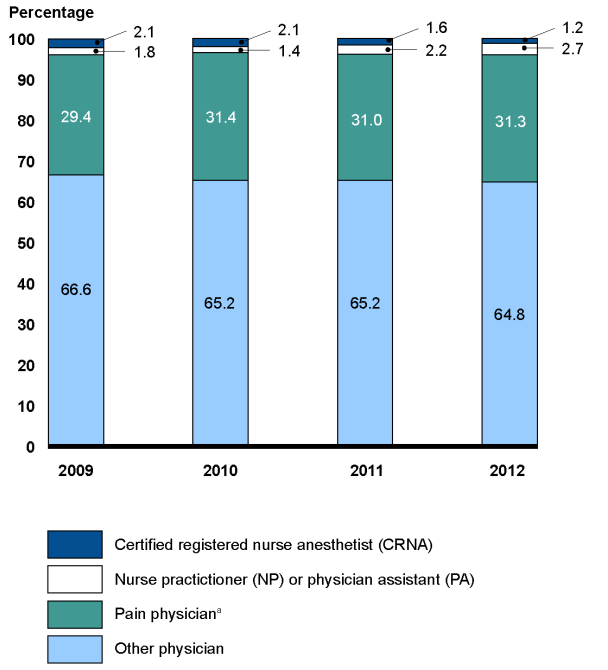
Source: GAO analysis of CMS data.

Notes: Provider type is based largely on the specialty indicated on the claim. Because services billed "incident to" indicate the specialty of the billing professional, our analysis is based on billing specialty. To the extent that CRNAs provided services in whole or in part that were billed "incident to" another professional, these data may understate the role of CRNAs in the provision of these procedures. Additionally, these data are based on provider location, rather than beneficiary residence. Roughly 0.2 percent of provider locations were uncategorized and are not reflected above.

In rural markets, provider shares followed the national trends. (See fig. 3.)

- Of the chronic pain procedures billed by rural providers, CRNA claims were a small percentage.
- Physicians without board certification in pain medicine billed for the majority of claims from rural providers; however, this number declined over time, while pain physicians billed for an increasing share—almost a third of rural claims in 2012.

Figure 3: Shares of Selected Chronic Pain Procedures in Medicare Fee-for-Service (FFS) Furnished in Rural Areas, by Provider Type, 2009 through 2012



Source: GAO analysis of CMS data.

Notes: Percentages may not add to 100 due to rounding. Provider type is based largely on the specialty indicated on the claim. Because services billed "incident to" indicate the specialty of the billing professional, our analysis is based on the billing specialty. To the extent that CRNAs, for example, provided services in whole or in part that were billed "incident to" another professional, these data may understate the role of CRNAs in the provision of these procedures. Additionally, these data are based on provider location, rather than beneficiary residence. Roughly 0.2 percent of provider locations were uncategorized and are not reflected above.

[a]To identify procedures billed by pain physicians, we cross-referenced the names of physicians listed by the American Board of Medical Specialties (ABMS) as board certified in pain medicine to a list of all Medicare providers.

After Noridian Began Denying CRNA Claims, Changes in the Number of Chronic Pain Procedures Billed Varied across Three Selected States

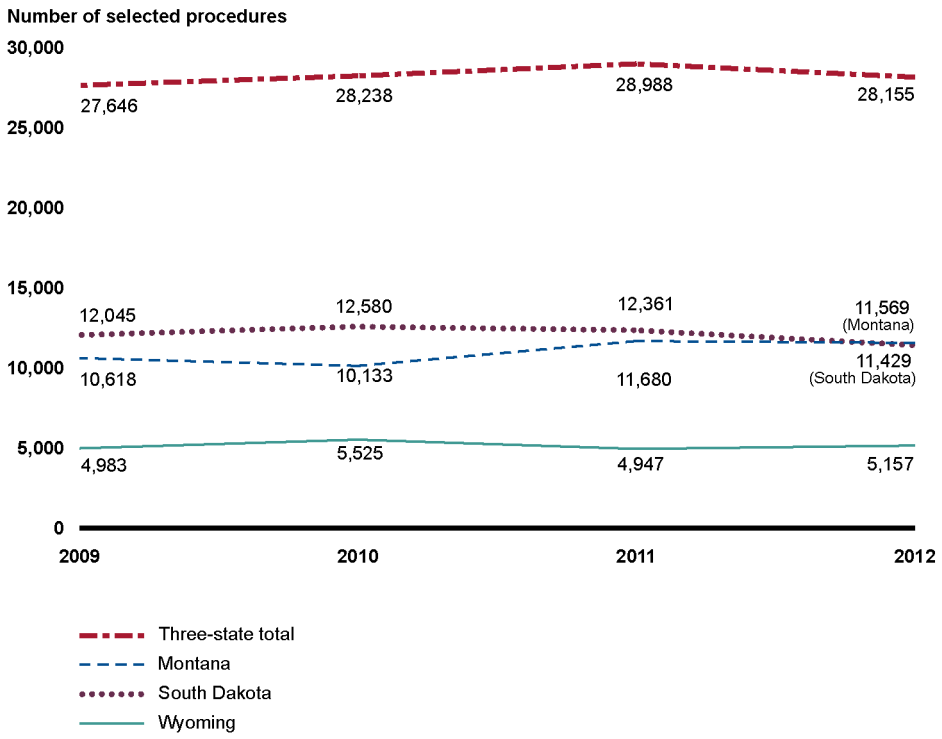
In mid-2011, Noridian began denying certain chronic pain management services that were billed by CRNAs and maintained this policy through 2012. The denial policy, among other factors, had the potential to affect beneficiary utilization in the Noridian states where CRNAs billed for chronic pain management services. We compared all providers' billing of selected chronic pain procedures in 2010—the year prior to the denial policy—with that in 2012—the full year in which the denial policy was in place—in the Noridian states with the highest share of CRNAs previously billing for these procedures. In 2009, CRNAs billed for 8 percent of the selected procedures in Montana, 1.7 percent in Wyoming, and 1.4 percent in South Dakota.[18] During that same year, CRNAs accounted for 19 percent of selected chronic pain procedures in rural areas of Montana, 4 percent in rural Wyoming, and less than 1 percent in rural South Dakota.

The change in chronic procedures billed between 2010 and 2012 was minimal for the three states overall, but varied by state.[19] In 2010, providers in those states billed for 28,238 selected chronic pain procedures—of which CRNAs accounted for 2.6 percent—and they billed for 28,155 procedures in 2012 when Noridian denied CRNA claims for these procedures. By state, the number of procedures billed by South Dakota and Wyoming providers declined by 9.2 percent and 6.7 percent, respectively, while Montana provider claims grew by 14 percent over the 2-year period. (See fig. 4.)

[18]The rest of the Noridian states—Alaska, Arizona, North Dakota, Oregon, and Utah—had very few or no CRNA claims. Washington State is also in Noridian's jurisdiction; however, because CRNAs in Washington are dually trained and certified as NPs, the denials did not apply to them. In addition, Idaho Part B was under another contract until 2011. For these reasons, we did not include Washington or Idaho in our analysis of Noridian states.

[19]In contrast, from 2009 through 2012, the number of selected procedures billed to Medicare FFS increased continuously nationwide (as shown in app. II).

Figure 4: Number of Selected Chronic Pain Procedures Billed to Medicare Fee-for-Service (FFS) in Montana, South Dakota, and Wyoming, 2009 through 2012



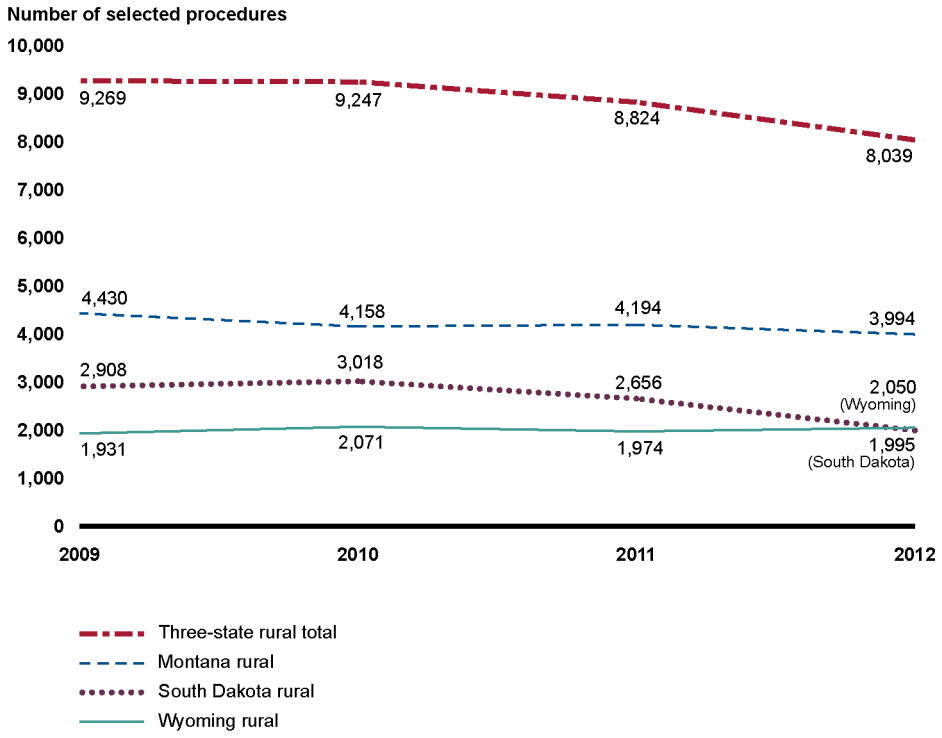
Source: GAO analysis of CMS data.

Notes: The Noridian denial policy was implemented during 2011, and was fully implemented in 2012. Additionally, these data are based on provider location, rather than beneficiary residence.

Among rural providers in Montana, South Dakota, and Wyoming, aggregate billing for selected chronic pain procedures declined between 2010 and 2012, but by state, the changes varied.[20] (See fig. 5.) In 2010, rural providers in those states billed for 9,247 selected chronic pain procedures, of which CRNAs accounted for 7.4 percent. In 2012, rural providers in those states billed for just over 8,000 selected procedures, a 13 percent decline from 2010. The drop in the aggregate number of procedures billed by rural providers in those states was largely the result of a decline in South Dakota; Montana and Wyoming showed only a slight decline in billing.

[20]In contrast, from 2009 through 2012, the number of procedures billed by rural providers to Medicare FFS increased continuously nationwide (as shown in fig. 2).

Figure 5: Number of Selected Chronic Pain Procedures Billed to Medicare Fee-for-Service (FFS) by Rural Providers in Montana, South Dakota, and Wyoming, 2009 through 2012



Source: GAO analysis of CMS data.

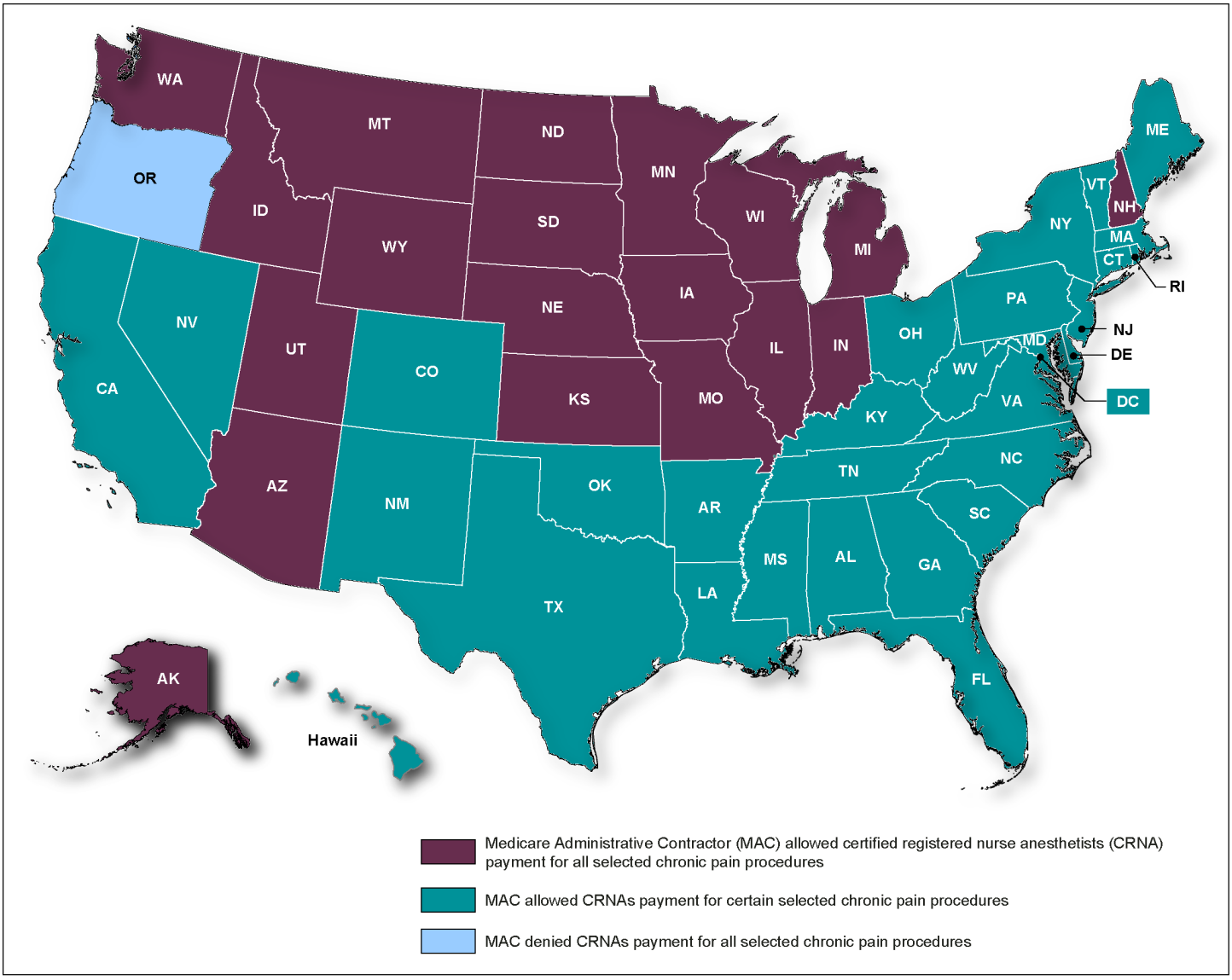
Notes: The Noridian denial policy was implemented during 2011, and was fully implemented in 2012. Additionally, these data are based on provider location, rather than beneficiary residence. Roughly 0.3 percent of provider locations were uncategorized and are not reflected above.

As of Early 2013, MACs Allowed Payment to CRNAs for All or Some Selected Chronic Pain Procedures in All but One State and for E/M Services in Roughly Half of the States

Nearly all MACs allowed Medicare payment to CRNAs for some, or all, selected chronic pain procedures. As of April 2013, six of the nine MACs had uniform payment policies for CRNA-provided chronic pain procedures across all states within a jurisdiction. The remaining three MACs varied their policies for one state within a jurisdiction. At the state level, MACs reported the following payment policies regarding chronic pain procedures (see fig. 6):

- allowed payment to CRNAs for all selected procedures in 19 states,
- allowed payment to CRNAs for a subset of selected procedures in 30 states and the District of Columbia, and
- denied payment to CRNAs for all selected procedures in the remaining state.

Figure 6: Medicare Fee-for-Service (FFS) Payment Policies for Selected Certified Registered Nurse Anesthetist (CRNA)-Provided Chronic Pain Procedures, by State, April 2013

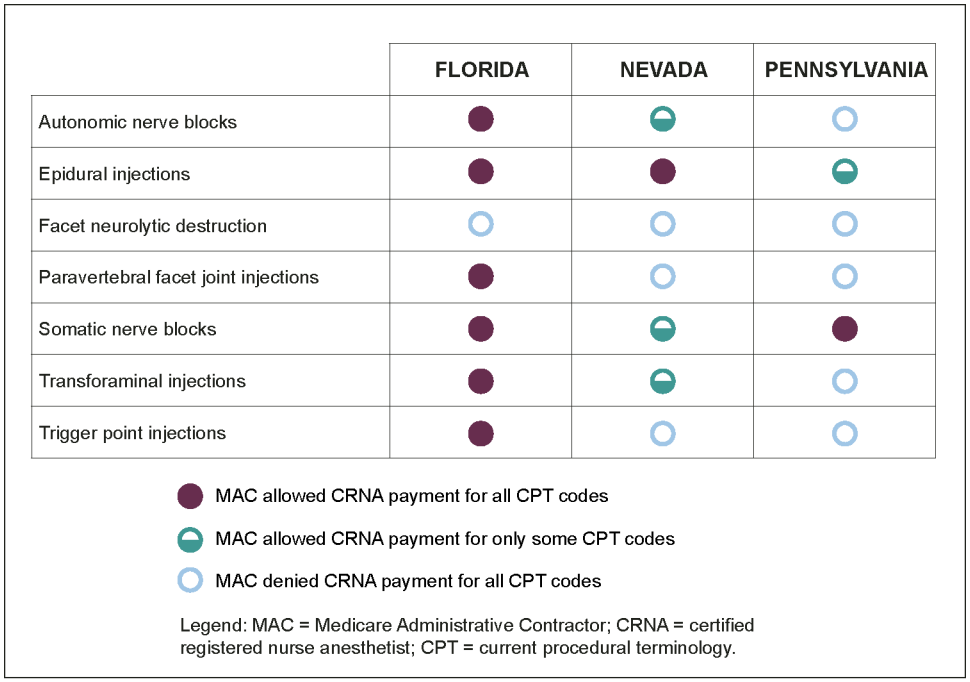


Sources: GAO analysis of MAC information; Map Resources (map).

Notes: Our selected chronic pain procedures were trigger point injections, epidural injections, transforaminal epidural injections, somatic nerve blocks, autonomic nerve blocks, paravertebral facet joint injections, and facet neurolytic destruction. Generally, a single MAC maintains both the Medicare Part A and Medicare Part B contracts for each state; however, as of April 2013, Minnesota, Wisconsin, and Illinois had separate MACs for Medicare Part A and Medicare Part B. For these states, the figure represents the payment policies for the MAC holding the state's Medicare Part B contract. As of December 2013, the following states have undergone a change in MAC since our data collection, which may affect their payment policy: California, Hawaii, Illinois, Maine, Massachusetts, Minnesota, Nevada, New Hampshire, Rhode Island, Vermont, and Wisconsin.

In the 30 states and the District of Columbia where MACs allowed payment to CRNAs for only certain chronic pain procedures, MAC payment policies indicated substantial variation in the specific procedures that can and cannot be billed. MACs most commonly denied CRNA payment for trigger point injections and facet neurolytic destruction, allowing CRNA payment for these procedures in only two states. Conversely, MACs allowed CRNAs payment for somatic nerve blocks in 20 states and epidural injections in 16 states. Furthermore, because each procedure can have multiple CPT codes associated with it, MACs may choose to only allow CRNAs payment for some of the CPT codes associated with the procedure and not others. This was the case for epidural injections, transforaminal epidural injections, autonomic nerve blocks, and somatic nerve blocks. Figure 7 illustrates the variation in MAC payment policies for selected CRNA-provided chronic pain procedures in Florida, Nevada, and Pennsylvania.

Figure 7: Medicare Fee-for-Service (FFS) Payment Policies for Selected Certified Registered Nurse Anesthetist (CRNA)-Provided Chronic Pain Procedures in Florida, Nevada, and Pennsylvania, April 2013



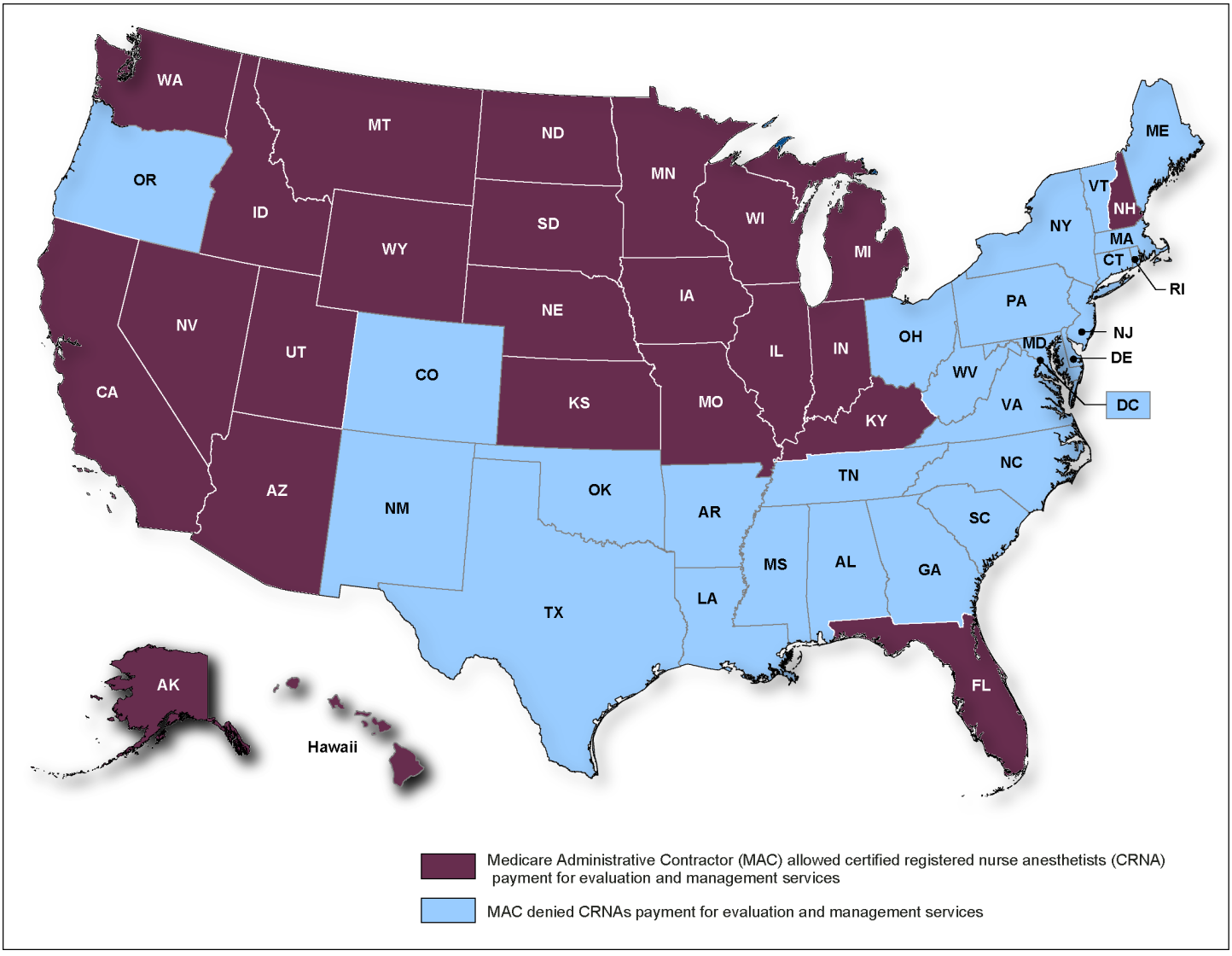
Source: GAO analysis of MAC information.

Note: CPT is a uniform coding system maintained by the American Medical Association used to identify and bill for medical procedures and services under public and private health insurance programs. A given procedure may have several CPT codes that, for instance, may indicate where on the body the procedure takes place or whether additional levels of a procedure were performed.

In contrast to their policies on chronic pain procedures, MACs were generally more restrictive regarding payment for CRNA-billed E/M services. As of April 2013, they reported the following payment policies for E/M services (see fig. 8):

- allowed payment to CRNAs for E/M services in 24 states, and
- denied payment to CRNAs for E/M services in 26 states and the District of Columbia.

Figure 8: Medicare Fee-for-Service (FFS) Payment Policies for Certified Registered Nurse Anesthetist (CRNA)-Provided Evaluation and Management (E/M) Services, by State, April 2013



Sources: GAO analysis of MAC information; Map Resources (map).

Notes: Generally, a single MAC maintains both the Medicare Part A and Medicare Part B contracts for each state; however, as of April 2013, Minnesota, Wisconsin, and Illinois had separate MACs for Medicare Part A and Medicare Part B. For these states, the figure represents the payment policies for the MAC holding the state's Medicare Part B contract. As of December 2013, the following states have undergone a change in MAC since our data collection, which may affect their payment policy: California, Hawaii, Illinois, Maine, Massachusetts, Minnesota, Nevada, New Hampshire, Rhode Island, Vermont, and Wisconsin.

Payment policies for CRNA-provided chronic pain procedures did not always align with payment policies for E/M services. In the 19 states where MACs reported that they allowed payment to CRNAs for all chronic pain procedures, they also allowed payment to CRNAs for E/M services. However, among the 30 states for which MACs told us that they allowed payment to CRNAs for only certain procedures, MACs indicated that they allowed payment for E/M services in 5—California, Florida, Hawaii, Kentucky, and Nevada—while denying payment for E/M services in the remaining states and the District of Columbia.

Faced with Challenges, MACs Inconsistently Implemented CMS's CRNA Payment Policy

The MACs did not implement CMS's CRNA payment policy consistently; three MACs took steps to apply the policy in 2013, while the remaining six MACs did not. MACs pointed to a number of challenges, including vagueness in state scope of practice laws, that affected their ability to implement the policy.

Three MACs Took Steps to Implement CMS Policy, While Remaining Six Did Not Revisit Payment Policies for 2013

Three MACs took steps to implement CMS's 2013 rule on CRNA payment and updated their CRNA payment policies, when necessary. CMS officials told us that they rely on MACs to determine whether CRNAs are allowed to provide specific services by reviewing each state's CRNA scope of practice laws. Two MACs made an effort to determine which services CRNAs are allowed to perform under each state's scope of practice laws. One of the two MACs directly reviewed the laws of the states in its jurisdiction, while the other MAC contacted each state to ask for its interpretation of the laws. Instead of attempting to interpret state scope of practice laws, a third MAC posted a new educational article on its website notifying CRNAs that they are responsible for knowing which services are allowable under their state laws.

The remaining six MACs did not take steps to revisit their CRNA payment policies for 2013. Three of the six MACs reviewed the scope of practice laws for a state in their jurisdictions prior to CMS's 2013 ruling at the request of the state or provider groups. For instance, one MAC stated that when it began its contract in 2009, the CRNA association for one of its states asked the MAC to consider allowing its CRNAs to be paid for chronic pain services, citing a long-standing history of providing these services. At that time, the MAC reviewed the state's CRNA scope of practice laws and determined that they did not preclude CRNAs from

providing chronic pain services. It then extended this affirmative payment policy across all states within its jurisdiction without reviewing further state laws. When asked about its implementation of CMS's 2013 CRNA payment policy, this MAC told us that it had not revisited any state scope of practice laws.

Two of the six MACs reported that they have overarching policies in place to determine coverage for all nonphysician provider types and, therefore, have not taken any steps to implement this latest CRNA payment policy. For example, one of these MACs noted that nonphysician providers must submit a request to the MAC to receive payment for a specific CPT code. The MAC will then review the relevant state scope of practice law and determine whether to allow payment for that code. The remaining MAC reported that it was waiting for further instructions from CMS before implementing the policy.

MACs Reported Difficulty in Interpreting State Scope of Practice Laws and Other Constraints

MACs discussed a variety of challenges that affected their implementation of CMS's CRNA payment policy. Most MACs reported challenges interpreting state scope of practice laws to make determinations about which services CRNAs are allowed to provide, noting that state scope of practice laws are generally vague and lack details about which specific services CRNAs can perform.[21] MACs that asked states to provide an interpretation of the scope of practice laws reported that the states generally were unable to provide definitive responses. For instance, one MAC that looked into a state's CRNA scope of practice in 2010 told us that the process to determine whether the state law allowed CRNAs to perform chronic pain services was convoluted; the

[21]In 2000, we reported that, for NPs and clinical nurse specialists, state laws varied in both the services these practitioners were allowed to provide and the settings in which they could provide the services. We stated that, because the Medicare program did not maintain information on what each state allows, providers may be reimbursed for services that are not within their allowed scope of practice. We noted that a federal advisory group recommended a survey of states to establish a national database of allowable practices, and work with national accreditation bodies to establish standard minimum scopes of practice. See GAO, *Medicare: Lessons Learned from HCFA's Implementation of Changes to Benefits*, GAO/HEHS-00-31 (Washington, D.C.: Jan. 25, 2000). In a 2001 50-state review of state scope of practice laws for NPs, PAs, and clinical nurse specialists, the HHS Office of Inspector General found that the state scope of practice laws were broad and, as a result, provided little guidance that contractors could use to process claims. See: HHS Office of Inspector General, *Medicare Coverage of Non-Physician Practitioner Services*, OEI-02-00-00290 (June 2001).

MAC was directed back and forth between many state and federal officials and provider groups. Another MAC said that when a determination could not be made about a state's scope of practice, it defaulted to allowing payment for all services approved by the AANA.

A few MACs discussed the difficulty of differentiating between acute and chronic pain services for payment purposes. Because CPT codes for services used to treat chronic pain are also used to bill for acute pain care in the peri-operative setting, one MAC told us that the only definitive way to determine whether the service was for chronic or acute pain is to review the medical record. However, some MACs explained that since chronic pain procedures are typically provided in an outpatient setting, they can rely on the place of service listed on the claim to make a best guess at whether the procedure was used to treat chronic pain. In addition, a few MACs noted that the frequency of the service can also be an indicator, with multiple injections billed for a patient by the same provider over a period of time indicating that the procedure was likely used to treat chronic pain.

Two MACs assumed that Medicare's rule requiring physician supervision of anesthesia services provided by CRNAs in hospital and ASC settings applied to chronic pain services in all settings; this assumption has potential implications for CRNA billing of chronic pain services. Under this rule, CRNA-provided anesthesia services furnished in hospital and ASC settings must be performed under the direction of a physician unless a state's governor has opted out of this requirement.[22] CMS guidance clarifies that this requirement applies to anesthesia services and not to analgesia services, which are defined to include services used to dull or alleviate pain without other effects, such as the loss of consciousness; the guidance does not expressly use the term "chronic pain management." These two MACs took the view that they would have needed to review CRNA scope of practice laws only in states that had opted-out of the supervision requirement, implying that they considered chronic pain management services to be anesthesia services. Regardless of the validity of this interpretation, the supervision rule only applies in hospital and ASC settings, not office settings. By applying this rule to office settings, these MACs may have unnecessarily restricted the services for

[22]42 C.F.R. 482.52.

which CRNAs in 10 of the states under these MACs' jurisdictions are allowed to bill.

Conclusion

Use of state scope of practice laws to govern Medicare coverage of CRNA-provided chronic pain care continues to be an area of uncertainty and confusion for many MACs. Similarly, certain MACs have interpreted the CRNA supervision rule, as it relates to CRNA-provided chronic pain management services, in a way that may inappropriately limit CRNA billing for such services when furnished in office settings. As a result, MACs have not implemented CMS's 2013 payment rule in a consistent manner that ensures appropriate beneficiary coverage and provider payment. Although CRNAs do not bill for a significant share of the chronic pain procedures we reviewed, if a MAC improperly denies payment to CRNAs in a state that allows CRNAs to independently furnish such services, beneficiary access to these services may be unnecessarily affected.

Recommendations for Executive Action

In order to ensure consistent implementation of CRNA payment policy, we recommend that the Administrator of CMS (1) provide specific instructions to MACs on how to determine coverage with reference to a state's scope of practice laws, including instructions on how to proceed if the state scope of practice laws are not explicit, and (2) clarify the applicability of the CRNA supervision rule to payment for CRNA-provided chronic pain management services.

Agency Comments and Our Evaluation

We provided a draft of this report to HHS for comment. In its written response, reproduced in appendix IV, HHS concurred with our two recommendations. Regarding our recommendation to provide specific instructions to MACs on how to determine coverage with reference to a state's scope of practice laws, HHS stated that CMS plans to send a letter directing all MACs to seek clarification from appropriate state officials or entities if state scope of practice laws are not explicit. Regarding our recommendation to clarify the applicability of the CRNA supervision rule to payment for CRNA-provided chronic pain management services, HHS stated that CMS will clarify that the supervision rule governs only anesthesia services furnished in hospitals or ASCs. HHS also provided technical comments that we incorporated as appropriate.

As agreed with your offices, unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 30 days from its date. At that time, we will send copies to the Secretary of Health and Human Services. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov.

If you or your staffs have any questions about this report, please contact me at (202) 512-7114 or cosgrovej@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix V.

James Cosgrove
Director, Health Care

Appendix I: Scope and Methodology

This appendix describes our methodology for analyzing recent trends in billing for selected chronic pain procedures, as well as changes in the number of procedures billed during the period of Noridian Healthcare Solutions (Noridian) denials. It also describes our efforts to ensure the reliability of the data.

Selection of Procedures

We focused our review on a set of seven categories of chronic pain procedures and corresponding current procedural terminology (CPT) codes. To select procedures, we obtained an American Association of Nurse Anesthetists (AANA) list of CPT codes that are billed by certified registered nurse anesthetists (CRNA). We categorized the CPT codes by procedure, in consultation with nurse and physician pain experts. We narrowed this list to procedures that were either reported by a Medicare Administrative Contractor (MAC) billing specialist as most likely to be used in treating chronic pain (as opposed to acute pain), or those commonly mentioned across payer resources—such as local coverage determinations (LCD)—as pain management options. We excluded other types of chronic pain management services, such as evaluation and management (E/M) and pharmacological services because of the unavailability of reliable data. The procedures we selected to include were:

- autonomic nerve blocks,
- epidural injections,
- facet neurolytic destruction,
- paravertebral facet joint injections,
- somatic nerve blocks,[1]
- transforaminal epidural injections,[2] and
- trigger point injections.

[1]This category excludes injections for the facial nerve and for digital nerves, such as treatment for Morton's Neuroma.

[2]This category excludes codes used for emerging technologies, services, or procedures.

Analysis of Medicare Claims Data

To determine trends in billing for the selected procedures, we analyzed 100 percent of Medicare fee-for-service (FFS) paid claims from 2009 through 2012.[3] We calculated the number of procedures billed to Medicare FFS from the carrier/physician file, excluding claims billed by some critical access hospitals. We considered procedures administered on more than one vertebral level of the spine to be separate procedures. We derived overall expenditures for selected chronic pain procedures from both provider payments (through the physician/carrier file) and outpatient facility payments (through the outpatient file).

We took additional steps in an effort to narrow our focus to procedures used to treat chronic pain. First, we excluded claims for procedures billed as distinct procedural services during the same encounter as another procedural service, where normally both would not be billable. We confirmed with several Medicare or chronic pain billing experts that, while not exclusively, these procedures are more likely than not to be for acute pain occurring in conjunction with another procedure. Additionally, we excluded claims in the carrier/physician file for procedures performed in the hospital inpatient setting. Several MACs told us that chronic pain is treated almost exclusively in outpatient settings. While these steps mitigated overcounting the number of chronic pain procedures, our analysis may still include some acute procedures and may exclude some chronic procedures.

We disaggregated biller (provider) type based largely on the provider specialty indicated on the claim.[4] The exception to this is the *pain physician* biller type. To identify physicians that are board certified in pain medicine—pain physicians—we cross-referenced the names of physicians provided by the American Board of Medical Specialties (ABMS) as board certified in pain medicine, to a list of all Medicare providers, as maintained by the Centers for Medicare & Medicaid Services (CMS) through the National Plan and Provider Enumeration

[3]We selected this period because Medicare's current provider identification system was fully implemented in mid-2008, and 2012 data were the most recent data at the time of our analysis.

[4]The "other physician" category includes any physician that is not board certified in pain medicine; these can include generalists, such as family practice and internal medicine, as well as specialists, such as anesthesiologists and sports medicine physicians.

System (NPPES).[5] Using a name-matching strategy, we were able to match 91 percent of the pain physicians to NPPES records. We then used the provider identifier from the NPPES data to identify pain physicians on the claims.

Our count of procedures provided by nonphysicians may be conservative. For example, physicians and certain other providers may bill "incident to"—whereby, for example, a physician might bill for a supervised service or procedure furnished by a nurse practitioner (NP), physician assistant (PA), or CRNA. There is no way on the claim to determine when a service is billed "incident to," rather than provided completely by the billing professional. Services billed "incident to" indicate the specialty of the billing professional. To the extent that nonphysician professionals provided services in whole or in part that were billed "incident to" another professional, we may have undercounted procedures provided by CRNAs, NPs, or PAs. In addition, providers, including pain physicians, can reassign their billing so that their employer may bill on their behalf. In this case, the provider identifier on the claim would be that of the employer, and we would not capture the provider as a pain physician based on our name matching strategy.

We also disaggregated the data by geographic location. To analyze urban and rural biller (provider) status, we used the CMS Core-Based Statistical Area crosswalk to identify those rural providers as providers with a zip code that is not associated with a Core-Based Statistical Area.

Changes in Billing during the Period of Noridian Denials

To determine the extent to which the number of selected chronic pain procedures billed to Medicare FFS changed during the period of denials, we analyzed Medicare FFS claims from 2009 through 2012 in those states under Noridian's jurisdiction that were subject to CRNA denials and under Noridian's jurisdiction for all 4 years of the study period. At the time of our analysis, Noridian's jurisdiction included Alaska, Arizona, Idaho, Montana, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming. We excluded Washington state, where CRNAs are dually trained as NPs, and thus not subject to the denials. We also excluded Idaho because it was under another contract until 2011. We then limited

[5]Specifically, the names were provided by the ABMS boards that certify in pain medicine: the American Board of Anesthesiology, the American Board of Physical Medicine and Rehabilitation, and the American Board of Psychiatry and Neurology.

our analysis to those states where CRNAs constituted at least 1 percent of the chronic pain provider market in 2009: Montana, South Dakota, and Wyoming. We measured the overall number of procedures billed to Noridian for the same set of selected chronic pain procedures, using the same methodology as in the broader trend analysis. We compared billing for selected chronic pain procedures prior to the MAC denials—which began in 2011—to billing in 2012 when the MAC denial policy was fully implemented. We assessed the trend both state-wide and in rural areas.

Data Reliability and Audit Standards

We ensured the reliability of the Medicare claims data, ABMS pain physician data, and NPPES data used in this report by performing appropriate electronic data checks, reviewing relevant documentation, and interviewing officials and representatives knowledgeable about the data. We found the data were sufficiently reliable for the purpose of our analyses.

We conducted this performance audit from March 2013 through February 2014 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Overall Trends in Billing by Selected Procedure

From 2009 through 2012, the number of selected chronic pain procedures billed to Medicare fee-for-service (FFS) grew by about 5.7 percent annually, while Medicare spending on these procedures grew at a slightly higher rate. (See tables 4 and 5.) Growth rates varied across procedures; for example, claims for somatic nerve blocks and paravertebral facet joint injections rose more rapidly at about 11 percent and 9 percent per year, respectively, while claims for epidural injections rose by about 2 percent annually.

Table 4: Number of Procedures Billed and Average Annual Growth Rate for Selected Chronic Pain Procedures in Medicare Fee-for-Service (FFS), 2009 through 2012

	Procedures billed (in thousands)				
Selected chronic pain procedure	**2009**	**2010**	**2011**	**2012**	**Average annual growth rate (percent)**
Autonomic nerve blocks	27	28	29	30	4.30%
Epidural injections	1,008	1,014	1,049	1,069	1.98
Facet neurolytic destruction	312	323	348	374	6.31
Paravertebral facet joint injections	1,028	1,164	1,240	1,317	8.61
Somatic nerve blocks	267	274	287	368	11.25
Transforaminal injections	950	1,028	1,069	1,073	4.16
Trigger point injections	352	362	390	421	6.09
Total	**3,945**	**4,192**	**4,412**	**4,654**	**5.67%**

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data.

Overall, Medicare payments for selected chronic pain procedures increased somewhat faster than the number billed, rising 6.5 percent annually between 2009 and 2012. (See table 5.) This rate of growth is above the average growth rate of 5.3 percent per year in overall Medicare Part B spending over the same period.[1] As with the trend in the number billed, average annual growth in expenditures varied across selected

[1]See The Boards of Trustees, *2010 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* (Washington, D.C.: August 2010); and *2013 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* (Washington, D.C.: May 2013).

chronic pain procedures; expenditures grew most rapidly for somatic nerve blocks (20 percent annually) and facet neurolytic destruction (13 percent annually), while expenditures for epidural injections grew least rapidly (5 percent annually).

Table 5: Payments and Growth Rates for Selected Chronic Pain Procedures in Medicare Fee-for-Service (FFS), 2009 through 2012

	Payments (dollars in millions)				
Selected chronic pain procedure	**2009**	**2010**	**2011**	**2012**	**Average annual growth rate (percent)**
Autonomic nerve blocks	$6.2	$6.3	$7.2	$7.5	6.30%
Epidural injections	297.0	301.2	329.0	339.6	4.56
Facet neurolytic destruction	107.9	112.7	130.7	156.2	13.13
Paravertebral facet joint injections	227.1	207.2	238.7	261.0	4.74
Somatic nerve blocks	26.4	28.9	34.3	45.6	20.04
Transforaminal injections	243.8	268.0	276.5	284.7	5.30
Trigger point injections	16.9	18.2	21.0	23.6	11.75
Total	**$925.3**	**$942.5**	**$1,037.4**	**$1,118.0**	**6.51%**

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data.

Appendix III: CRNA Share of Selected Chronic Pain Procedures, by State

This appendix provides further detail on how certified registered nurse anesthetists' (CRNA) market share of selected chronic pain procedures changed between 2009 and 2012, by state.

Table 6: Certified Registered Nurse Anesthetist (CRNA) Market Share for Selected Chronic Pain Procedures in Medicare Fee-for-Service (FFS), by State, 2009 and 2012

	Percentage of procedures billed by certified registered nurse anesthetists		
State	2009	2012	Percentage point change from 2009 through 2012
New Hampshire	1.11%	5.50%	4.39
Tennessee	0.96	3.48	2.52
Mississippi	0.08	0.51	0.43
Wisconsin	0.19	0.41	0.22
Kansas	3.82	4.03	0.21
Illinois	0.32	0.53	0.21
Alabama	0.02	0.09	0.07
Michigan	0.18	0.22	0.04
Hawaii	0.00	0.03	0.03
Nevada	0.15	0.17	0.02
Indiana	0.05	0.07	0.02
Arkansas	0.08	0.09	0.01
Georgia	0.01	0.02	0.01
Virginia	0.00	0.01	0.01
Maine	0.01	0.02	0.01
Florida	0.01	0.01	0.00
Maryland	0.00	0.00	0.00
South Carolina	0.00	0.00	0.00
Ohio	0.00	0.00	0.00
Delaware	0.00	0.00	0.00
District of Columbia	0.00	0.00	0.00
Massachusetts	0.00	0.00	0.00
New Jersey	0.00	0.00	0.00
North Dakota	0.00	0.00	0.00
Rhode Island	0.00	0.00	0.00
Vermont	0.00	0.00	0.00
West Virginia	0.00	0.00	0.00
Louisiana	0.02	0.01	-0.01

State	Percentage of procedures billed by certified registered nurse anesthetists		Percentage point change from 2009 through 2012
	2009	2012	
Connecticut	0.01	0.00	-0.01
New York	0.02	0.01	-0.01
North Carolina	0.01	0.00	-0.01
Pennsylvania	0.02	0.00	-0.02
California	0.06	0.02	-0.04
Alaska	0.12	0.00	-0.12
Utah	0.15	0.00	-0.15
Texas	0.30	0.15	-0.15
Oklahoma	1.42	1.16	-0.26
Washington	0.78	0.52	-0.26
Missouri	0.42	0.11	-0.31
Kentucky	0.86	0.54	-0.32
Idaho	1.07	0.63	-0.44
Oregon	0.56	0.00	-0.56
Colorado	0.88	0.18	-0.70
Minnesota	2.64	1.93	-0.71
Arizona	0.82	0.00	-0.82
New Mexico	1.36	0.28	-1.08
South Dakota	1.35	0.00	-1.35
Wyoming	1.61	0.02	-1.59
Nebraska	4.23	2.62	-1.61
Iowa	7.27	4.30	-2.97
Montana	8.08	0.26	-7.82

Source: GAO analysis of Centers for Medicare & Medicaid Services (CMS) data.

Notes: The CRNA provider type is based on the specialty indicated on the claim. Because claims for services billed “incident to” indicate the specialty of the billing professional, our analysis is based on the billing specialty. To the extent that CRNAs provided services in whole or in part that were billed “incident to” another professional, these data may understate the role of CRNAs in the provision of these procedures. Additionally, these data are based on provider location, rather than beneficiary residence.

Appendix IV: Comments from the Department of Health and Human Services

DEPARTMENT OF HEALTH & HUMAN SERVICES

OFFICE OF THE SECRETARY

Assistant Secretary for Legislation
Washington, DC 20201

JAN 24 2014

James Cosgrove
Director, Health Care
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Mr. Cosgrove,

Attached are comments on the U.S. Government Accountability Office's (GAO) draft report entitled, "Medicare – Nurse Anesthetists Billed for Few Chronic Pain Procedures; Implementation of CMS Payment Policy Inconsistent" (GAO-14-153).

The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

Jim R. Esquea
Assistant Secretary for Legislation

Attachment

THE DEPARTMENT OF HEALTH AND HUMAN SERVICES' (HHS) GENERAL COMMENTS TO THE GOVERNMENT ACCOUNTABILITY OFFICE'S DRAFT REPORT, ENTITLED, "MEDICARE – NURSE ANESTHETISTS BILLED FOR FEW CHRONIC PAIN PROCEDURES; IMPLEMENTATION OF CMS PAYMENT POLICY INCONSISTENT" (GAO-14-153)

The Centers for Medicare & Medicaid Services, within HHS, issued a final rule, effective January 2013, clarifying that certified registered nurse anesthetists (CRNA) can bill Medicare for any services, including chronic pain management services, that a CRNA is legally authorized to perform in the state in which the services are furnished. GAO found from 2009 to 2012 that CRNAs billed Medicare fee-for-service for a minimal share of selected pain procedures, less than one half of one percent of these procedures each year. Additionally, GAO found that three of the nine Medicare Administrative Contractors (MACs) took steps to implement CMS's rule. GAO concluded that MACs have not implemented CMS's 2012 payment rule in a consistent manner that ensures appropriate beneficiary coverage and provider payment. GAO expressed concern that if a MAC improperly denies payment to CRNAs in a state that allows CRNAs to independently furnish such services, beneficiary access to these services may be affected.

The GAO recommendations and HHS responses to those recommendations are discussed below.

GAO Recommendation

The GAO recommends that CMS provide specific instructions to MACs on how to determine coverage with reference to a state's scope of practice laws, including instructions on how to proceed if the state scope of practice laws are not explicit.

HHS **Response**

HHS concurs with the recommendation. Section 1861(bb)(1) of the Social Security Act defines the term "services of a certified registered nurse anesthetist" as "anesthesia and related care furnished by a certified registered nurse anesthetist…which the nurse anesthetist is legally authorized to perform as such by the State in which the services are furnished." While we recognize that state scope of practice laws vary in their detail and specificity, state officials are in the best position to determine the scope of anesthesia and related care that CRNAs are allowed to furnish in their state and any required conditions that are applied. CMS plans to send out a letter to all of the MACs indicating that if it is not clear whether the state scope of practice allows CRNAs to perform the services for which they are billing, they should seek clarification from the appropriate state officials or entities, such as the board of nursing. By consulting with state officials, contractors will have the best information about individual state laws upon which to determine local Medicare payment policy.

GAO Recommendation

The GAO recommends that CMS clarify the applicability of the CRNA supervision rule to payment for CRNA-provided chronic pain management services.

THE DEPARTMENT OF HEALTH AND HUMAN SERVICES' (HHS) GENERAL COMMENTS TO THE GOVERNMENT ACCOUNTABILITY OFFICE'S DRAFT REPORT, ENTITLED, "MEDICARE – NURSE ANESTHETISTS BILLED FOR FEW CHRONIC PAIN PROCEDURES; IMPLEMENTATION OF CMS PAYMENT POLICY INCONSISTENT" (GAO-14-153)

HHS Response

HHS concurs with the recommendation, and CMS will clarify that the supervision rule contained in the Medicare Conditions of Participation governs only anesthesia services furnished in hospitals or ambulatory surgical centers (ASCs). The supervision rule does not apply to non-anesthesia services furnished in hospital or ASCs nor to any service furnished outside of those settings, such as services furnished in the home or in a physician's office.

Appendix V: GAO Contact and Staff Acknowledgments

GAO Contact

James Cosgrove, (202) 512-7114 or cosgrovej@gao.gov

Staff Acknowledgments

In addition to the contact named above, Rosamond Katz, Assistant Director; Sandra C. George; Richard Lipinski; Kate Nast; and Kathryn Richter made key contributions to this report.