



Report to the Committee on
Transportation and Infrastructure, House
of Representatives

July 2017

AIR AMBULANCE

Data Collection and Transparency Needed to Enhance DOT Oversight

Accessible Version

GAO Highlights

Highlights of [GAO-17-637](#), a report to the Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

Helicopter air ambulances reduce transport times for critically ill patients during life-threatening emergencies. Although patients typically have little to no choice over the service or provider given the often emergency nature of the transports, they might be billed for charges that have potentially devastating financial impacts. GAO was asked to review air ambulance pricing. This report examines: (1) the prices charged for air ambulance service, (2) the factors that affect prices, and (3) stakeholders' views on any actions the federal government could take to address air ambulance pricing. To answer these questions GAO analyzed 2 years of data (2010 and 2014—the latest available) on prices from CMS and a private health insurance database; interviewed 26 stakeholders, such as 8 air ambulance providers chosen to represent a range of types (hospital-affiliated and independent) and sizes; and interviewed DOT and CMS officials.

What GAO Recommends

The Secretary of Transportation should: (1) communicate a method to receive air ambulance, including balance billing, complaints; (2) take steps to make complaint information publicly available; (3) assess available data and determine what information could assist in the evaluation of future complaints; and (4) consider air ambulance consumer disclosure requirements. DOT concurred with all but the third recommendation, stating additional information is not needed for such purposes. GAO stands by the recommendation, as discussed in this report. DOT and CMS also provided technical comments which were incorporated as appropriate.

View [GAO-17-637](#). For more information, contact Gerald L. Dillingham, Ph.D. at (202) 512-2834 or DillinghamG@gao.gov.

July 2017

AIR AMBULANCE

Data Collection and Transparency Needed to Enhance DOT Oversight

What GAO Found

Between 2010 and 2014, the median prices providers charged for helicopter air ambulance service approximately doubled, from around \$15,000 to about \$30,000 per transport, according to Medicare data from the Centers for Medicare & Medicaid Services (CMS) and private health insurance data. Air ambulance providers do not turn away patients based on their ability to pay and receive payments from many sources depending on the patient's coverage, often at rates lower than the price charged. For example, the Medicare median payment was \$6,502 per transport in 2014. Air ambulance providers might bill a privately-insured patient for the difference between the price charged and the insurance payment—a practice called balance billing—when the provider lacks an in-network contract with the insurer. However, due to a lack of information it is unclear to what extent patients are balance billed.

Factors such as a provider's proportion of transports provided by payer and competition may play a role in air ambulance prices charged, but data to assess these factors are not available. For example, selected providers reported that they adjust prices to receive sufficient revenue from private health insurance to account for certain lower-paid transports, such as those covered by Medicare. Price increases may also be tied to the industry's characteristics such as apparent market concentration—the three large independent providers reported operating 73 percent of the industry's total helicopters in 2016. An analysis of these factors is not possible due to a lack of currently available data such as the number of transports or the industry's composition by provider.

Selected stakeholders we spoke to proposed actions to address air ambulance pricing issues, including (1) raising Medicare rates, (2) allowing state-level regulation of air ambulance prices, and (3) improving data collection for the purposes of investigations and transparency regarding prices. Stakeholders expressed mixed views on the first two proposals but none disagreed with the third. Federal internal control standards state that management should identify and communicate information needed to achieve objectives and address risks. The Department of Transportation (DOT) has discretionary authority to investigate potentially unfair practices in air transportation or the sale of air transportation, but has not exercised this authority in regards to helicopter air ambulances. DOT officials said they need additional information about the air ambulance industry. For example, DOT officials note that they have received few air ambulance complaints since 2006 and report that consumers may not think of DOT as the place to complain. Although DOT recently modified its online form to include air ambulance complaints, it has not communicated how to file complaints. Without doing so and obtaining more industry data, DOT is missing important information needed to put complaints into the context of the overall industry that could affect its assessment on whether to pursue investigations. Further, stakeholders such as hospital staff could benefit from greater transparency as they currently have limited ability to make air ambulance decisions that serve both the financial interests and medical needs of the patient.

Contents

Letter	1
Background	4
Median Prices Charged Approximately Doubled from 2010 to 2014, and Extent of Balance Billing Is Unknown	11
Various Factors May Play a Role in Air Ambulance Prices, but Data Are Limited	16
Selected Stakeholders Proposed Actions Regarding Air Ambulance Pricing, Including Improved Data Collection and Transparency	21
Conclusions	27
Recommendations for Executive Action	28
Agency Comments and Our Evaluation	29
<hr/>	
Appendix I: Objectives, Scope, and Methodology	31
Appendix II: Comments from the Department of Transportation	34
Appendix III: GAO Contact and Staff Acknowledgments	35
Appendix IV: Accessible Data	36
Data Tables	36
Agency Comment Letter	36
<hr/>	
Tables	
Table 1: Potential for Provider's Balance Billing a Patient for a Portion of the Air Ambulance Price Charged by the Patient's Insurance Coverage	8
Table 2: Views of 26 Selected Stakeholders Regarding Potential Federal Actions to Address Air Ambulance Prices	22
Data Table for Figure 2: Prices Charged by Providers for Helicopter Air Ambulance Service, 2010 and 2014	36
Data Table for Figure 3: Average Percentage of Selected Air Ambulance Providers' Transports and Average Payments by Key Payer in 2016	36

Figures

Figure 1: Medical Crew from Helicopter Air Ambulance Transferring Patient	5
Figure 2: Prices Charged by Providers for Helicopter Air Ambulance Service, 2010 and 2014	12
Figure 3: Average Percentage of Selected Air Ambulance Providers' Transports and Average Payments by Key Payer in 2016	13

Abbreviations

ADA	Airline Deregulation Act of 1978
AMGH	Air Medical Group Holdings
CMS	Centers for Medicare & Medicaid Services
DOT	U.S. Department of Transportation
FAA	Federal Aviation Administration
HCCI	Health Care Cost Institute
OST	Office of the Secretary of Transportation

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



July 27, 2017

The Honorable Bill Shuster
Chairman
The Honorable Peter A. DeFazio
Ranking Member
Committee on Transportation and Infrastructure
House of Representatives

Air ambulances provide emergency services for critically ill patients, transporting them from the scene of an accident or from a medical facility to a hospital with a higher level of care. Air ambulance transportation is widely regarded as having a beneficial impact on improving the chances of survival and recovery for trauma victims and other critical patients, particularly in rural areas that lack readily accessible advanced-care facilities such as trauma or burn centers. Medical theory and practice hold that providing critically injured patients with medical intervention within the first hour after injury occurs—the so-called “golden hour”—can significantly improve chances for survival and recovery. Air ambulance helicopters, with their ability to land at accident sites and quickly shuttle to landing areas at or near hospitals, can reduce transport times for many patients.

Since enactment of the Airline Deregulation Act of 1978¹ (ADA), which deregulated the domestic air carrier industry, including air ambulance providers,² the number of air ambulance helicopters has grown steadily—from an estimated fewer than 100 helicopter air ambulances in the early 1980s to 1,045 in 2016. In the past few years, instances of “balance billing”—when patients with private health insurance are billed by providers for the difference between the air ambulance price charged and the insurer’s payment—have received attention in the news media. For example, on December 4, 2015, a helicopter air ambulance patient was

¹Pub. L. No. 95-504, 92 Stat. 1705 (1978).

²Court decisions subsequent to the passage of the ADA have determined that air ambulances are air carriers as defined in the ADA. See, e.g. *Schneberger v. Air Evac EMS, Inc.*, 2017 U.S. Dist. LEXIS 36701 (Explaining that courts have all but uniformly held that air ambulance providers are “air carriers” under the ADA); *EagleMed, LLC v. Wyoming*, 2016 U.S. Dist. LEXIS 185156; *Hiawatha Aviation of Rochester, Inc. v. Minnesota Dept. of Health*, 389 N.W. 2d 507 (Minn. 1986); *Med-Trans Corp. v. Benton*, 581 F. Supp. 2d 721 (E.D. N.C., West Div. 2008). Air ambulances are considered to be on-demand air carriers, along with air taxis and helicopter tour operators.

transported 66 miles from Tawas, Michigan, to Saginaw, Michigan. The provider, which was not contracted with the patient's insurance, charged \$35,000 for the transport. The patient's insurance paid \$6,320, leaving a balance of almost \$29,000 for which the patient was billed. The patient's family later unsuccessfully petitioned both the insurer and the state of Michigan³ on this bill, noting that during the emergency, which involved a gunshot wound to the leg from a hunting accident, no alternative transport options were offered. Although most patients have little to no choice over the service or provider during air ambulance transports, they might be billed for charges that can have potentially devastating financial impacts. For example, media reports of balance billing have included a provider placing a lien on a patient's home as well as patients having their credit negatively affected or filing for bankruptcy.⁴

You asked us to review issues related to air ambulance operations and pricing. This report focuses on helicopter air ambulance service and examines (1) what is known about the prices charged for air ambulance service, (2) what is known about the factors that affect the prices charged for air ambulance service, and (3) what actions, if any, selected stakeholders believe the federal government should take regarding air ambulance pricing. To describe what is known about air ambulance prices charged, we analyzed data on air ambulance prices charged and payments for 2010 and 2014 from a Medicare claims database of the Department of Health & Human Services' Centers for Medicare & Medicaid Services (CMS) and from private health insurance information published by the Health Care Cost Institute (HCCI).⁵ Although HCCI data includes approximately 40 million individuals with employer-sponsored insurance, the data may not be generalizable to the entire privately insured population. The years 2010 and 2014 were selected as they were the furthest back and most recent available from HCCI, could be compared across both data sets, and allowed us to analyze changes over time. We assessed the reliability of both data sets by reviewing related documentation and comparing our results across both data sets and to

³Source: State of Michigan Department of Insurance and Financial Services. File No. 154884-001-SF. We do not have information on the extent to which the patient ultimately paid this balance. It is possible that the provider later discounted the bill.

⁴Peter Eavis, "Air Ambulances Offer a Lifeline, and Then a Sky-High Bill," *New York Times* (May 5, 2015) and Donna Rosato, "Air Ambulances: Taking Patients for a Ride," *Consumer Reports* (Apr. 6, 2017).

⁵See HCCI, *Data Brief: Non-Shoppable Health Care Services: Inpatient Hospitalizations* (February 2017), 9-10.

published sources, among other things, and determined both sources were sufficiently reliable for the purposes of this report. To gauge the scope of the air ambulance industry, we analyzed available information from the *Atlas & Database of Air Medical Services, 2010-2016*. To describe what is known about factors affecting prices and selected stakeholders' views on actions the federal government could take to address pricing, we selected and interviewed 26 stakeholders, including representatives from: 8 air ambulance providers (3 large independent providers and 5 hospital-affiliated providers) chosen to represent a range of business model types (independent and hospital-affiliated), sizes, and known perspectives in the industry; 2 associations representing air ambulance providers; 6 groups familiar with air ambulance business and billing, such as industry analysts and consultants; 4 states active in assessing air ambulance costs and prices charged; 2 associations of state officials; 2 associations representing health insurers; and 2 groups involved with consumer policy or research. Although the views of these selected stakeholders are not generalizable to those of all air ambulance stakeholders, they represent a range of perspectives. We compared the U.S. Department of Transportation's (DOT) practices and procedures for aspects of its air ambulance oversight to federal internal control standards related to information collection and external communication.⁶ We reviewed documentation—including pertinent laws, regulations, guidance, enforcement actions, and legal opinions—and interviewed officials from DOT and the Department of Health & Human Services' Centers for Medicare & Medicaid Services (CMS). For more detailed information on our scope and methodology, see appendix I.

We conducted this performance audit from July 2016 to July 2017 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 our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

⁶GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

Background

Air ambulance providers inhabit a unique position at the intersection of aviation and medical services. Providing air ambulance service is capital intensive and requires both aviation and medical investments (see fig. 1).⁷ Air ambulances must be ready to deploy at a moment's notice in response to emergencies. Air ambulances are of two main types—rotor wing (helicopter) and fixed-wing aircraft. These two types of aircraft are generally used on different types of missions, with helicopters providing on-scene responses and shorter distance hospital-to-hospital transports and fixed-wing aircraft providing longer transports between airports. Because helicopter air ambulances make up approximately 74 percent of all air ambulances, this report focuses on helicopter air ambulance service.⁸ This report also focuses on air ambulance providers that are direct air carriers.⁹ Although most people may associate helicopter air ambulance with on-scene response to an accident such as a car accident, the majority of transports are interfacility, or from hospital to hospital. For example, Air Methods, the largest air ambulance provider, reported in June 2016 that of its total flights in the first quarter of 2016, approximately 70 percent were interfacility and 30 percent were on-scene response.

⁷Aviation investments include the aircraft, aircraft maintenance, and a pilot, while medical investments include equipment and the medical crew—typically a nurse and paramedic.

⁸According to the *Atlas & Database of Air Medical Services*, there were 1,045 helicopter air ambulances and 360 fixed-wing air ambulances in 2016.

⁹In general, a “direct air carrier” is a person or other entity that provides or offers to provide air transportation and that has control over the operational functions involved in providing that transportation. See e.g., 14 C.F.R. § 110.2. See also, 14 C.F.R. § 197.3 (an air carrier or foreign air carrier directly engaged in the operation of an aircraft under a certificate, registration, order, or permit issued by DOT); 14 C.F.R. § 380.2 (a certificated, commuter, or foreign air carrier, or an air taxi operator registered under part 298, or a Canadian charter air taxi operator registered under part 294, that directly engages in the operation of aircraft under a certificate, authorization, permit, or exemption issued by DOT). DOT defines an “indirect air carrier” as a person or other entity, such as a flight brokerage company, that engages indirectly in air transportation operations and that uses the services of a direct air carrier.

Figure 1: Medical Crew from Helicopter Air Ambulance Transferring Patient



Source: REACH Air Medical, part of Air Medical Group Holdings. | GAO-17-637

Unlike other aviation services that are scheduled ahead of time, air ambulance transports are initiated only in response to time-sensitive medical-related events. In the case of on-scene response transports, first responders decide when air ambulance service is needed, while hospital staff make decisions regarding when to initiate interfacility transports. Because air ambulance providers transport critically sick or injured patients facing time-sensitive emergencies, patients typically have little to no ability to make cost-saving decisions, such as selecting a provider that participates in the patient's insurance or electing to be transported by ground ambulance. On the other hand, air ambulance providers respond to emergencies without regard for a patient's ability to pay and provide the same service regardless of the amount the provider will ultimately be compensated for the transport.

Air ambulance providers fall under three main types of business models, which vary on which entity makes business decisions, including setting

prices and determining in-network agreements with private insurance. These business models are:¹⁰

- *Hospital-affiliated*¹¹—may be a department of a hospital or owned by a consortium of hospitals, is typically non-profit, makes business decisions, and provides the medical crew. These providers may operate their own aviation services or contract for the services, often from companies that operate their own air ambulance service as independent providers.
- *Independent*—a company, typically for-profit, that handles both medical and aviation aspects and makes business decisions.
- *Hybrid*—joint venture between a hospital and an independent provider where the hospital typically provides the medical crew but (unlike the hospital-affiliated model) does not make business decisions, although the hospital name may be branded on the helicopter. Instead, the independent provider makes business decisions such as setting prices.

In 2007, we reported that a few large providers dominated the air ambulance industry, and in 2010, we reported that the industry had shifted since 1999 from mostly hospital-affiliated providers toward independent providers.¹² These trends appear to have continued. For example, in 2015 three for-profit, independent providers together reported operating 692 helicopters, or about 66 percent of the total 1,045 helicopters in the industry that year. These three providers operate helicopters that span all three business model types across multiple states. As a result, some of these 692 helicopters may be under contract for aviation services to hospital-affiliated providers, in which case the

¹⁰There is a fourth category of providers that are operated by government entities or the military. Such providers may serve other functions in addition to air ambulance, such as search and rescue or disaster assessment. For example, the Maryland State Police operates air ambulances that also serve these other functions. Since these providers are not dedicated air ambulance providers and may offer services at no charge to residents, we excluded them from this report.

¹¹Hospital-affiliated providers are sometimes called hospital-based or traditional providers, and independent providers are sometimes called community-based providers. We use the terms hospital-affiliated and independent throughout this report.

¹²GAO, *Aviation Safety: Improved Data Collection Needed for Effective Oversight of Air Ambulance Industry*, [GAO-07-353](#) (Washington, D.C.: Feb. 21, 2007) and *Air Ambulance: Effects of Industry Changes on Services Are Unclear*, [GAO-10-907](#) (Washington, D.C.: Sept. 30, 2010).

hospital pays the independent provider a fixed rate and sets the prices charged for the service rather than the independent provider.

Air ambulance providers, like other medical service providers, charge standard rates for all transports but receive payments from many sources, often at varying rates. Air ambulance providers charge patients based on a pre-established lift-off fee and per mile fee, regardless of medical services provided in route. Providers then receive payments from a mix of sources, depending on the transported patient's insurance coverage.¹³ The amount paid by private health insurance also depends on whether the provider has a contract in place with the insurer. Key payers of air ambulance service charges include:

- *Medicare*—a federal program for people who are 65 or older and certain younger people with disabilities, regardless of income level.
- *Medicaid*—a joint federal and state program for some people with limited income and resources.
- *Private health insurance companies*—may have a contractual in-network agreement with an air ambulance provider for a payment rate negotiated ahead of time. Without such a contract, air ambulance providers are considered out of network, and the insurance company's policies set its payment rates.
- *Self-pay*—patients not covered by insurance.

Whether or not an air ambulance provider may bill a patient for amounts in excess of the amount covered by insurance, as well as any deductibles, coinsurance, or copayment—called balance billing—varies based on the patient's insurance coverage. Under Medicare rules, for example, air ambulance providers are not permitted to balance bill Medicare patients for ambulance services beyond deductibles and coinsurance requirements.¹⁴ With respect to Medicaid, providers participating in a state's Medicaid program are required to accept Medicaid payment as payment in full and are prohibited from collecting

¹³In health care, these are usually called billed charges but we refer to them as “prices charged” throughout this report.

¹⁴See, e.g., 42 C.F.R. § 414.610 providing, in pertinent part, that “[e]ffective with implementation of the ambulance fee schedule...all payments made for services are made only on an assignment-related basis. Ambulance suppliers must accept the Medicare allowed charge as payment in full and may not bill or collect from the beneficiary any amount other than the unmet Part B deductible and Part B coinsurance amounts.”

any additional amounts from Medicaid patients, other than authorized cost sharing amounts.¹⁵ Patients with private health insurance might only be balance billed when the insurer and provider lack an in-network agreement, while uninsured patients might be held responsible by the provider for the entire price charged (see table 1).

Table 1: Potential for Provider’s Balance Billing a Patient for a Portion of the Air Ambulance Price Charged by the Patient’s Insurance Coverage

Insurance coverage	Can the patient receive a balance bill?	
	Yes	No
Medicare (participating providers)		X
Medicaid (participating providers)		X
Private Insurance: In-network with air ambulance provider		X
Private Insurance: Out-of-network with air ambulance provider	X	
Self-pay (uninsured)	X	

Source: GAO | GAO-17-637

CMS sets rates and pays claims for Medicare. Medicare payments, including beneficiary co-payments, for helicopter air ambulance service totaled approximately \$460 million in 2014.¹⁶ Although CMS typically sets Medicare payment rates by considering whether payments are adequate for a relatively efficient provider,¹⁷ Medicare rates for air ambulance service were last updated in 2002 as part of a negotiated rulemaking¹⁸ that involved public and industry stakeholders. Beginning with the negotiated rulemaking in 2002 through 2006, CMS phased in an air ambulance fee schedule as part of a series of Medicare reforms¹⁹ that were enacted into law in 1997. The fee schedule redistributed payments

¹⁵See, 42 C.F.R. § 447.15.

¹⁶ Medicare beneficiaries typically have a copayment of 20 percent of the Medicare-approved amount after the deductible is met.

¹⁷CMS typically does this by examining data such as access to care, providers’ access to capital, and provider costs to provide the service. See MedPAC, “Chapter 2: Assessing payment adequacy and updating payments in fee-for-service Medicare,” *Report to the Congress: Medicare Payment Policy* (March 2016).

¹⁸67 Fed. Reg. 9100 (Feb. 27, 2002).

¹⁹See, e.g., Balanced Budget Act of 1997, Pub. L. No. 105-33, § 4531(b)(2), 111 Stat. 251, 450.

among various types of ambulance services and effectively raised the payment amounts for air ambulance service. Medicare air ambulance payments include three components: a base payment, a separate payment for mileage to the nearest appropriate facility, and a geographic adjustment factor. In addition, there is a permanent add-on payment that includes a 50 percent increase to both the base and mileage rate for rural air ambulance transports. Since 2006, CMS has adjusted rates annually, primarily based on inflation.

Although the prices, routes, and services of the air ambulance industry are largely deregulated, DOT oversees certain aspects of the industry. As air carriers, air ambulance providers fall under the ADA, which was designed to promote “maximum reliance on competitive market forces” as the means to best further “efficiency, innovation, and low prices” as well as “variety [and] quality... of air transportation.”²⁰ The ADA also contains a provision that explicitly precludes state-level regulation of matters related to air carrier rates, routes, and services.²¹ Beyond aviation safety, which DOT’s Federal Aviation Administration (FAA) oversees in a variety of ways, DOT oversees certain aspects of the industry. DOT’s involvement with the air ambulance industry falls within the Office of the Secretary of Transportation (OST).²² For example, as an air carrier, an air ambulance provider must obtain economic authority from DOT before offering service.²³ In addition, OST’s Office of the General Counsel issues guidance and opinion letters regarding the ADA provision that precludes state level regulation of air ambulance prices, routes, and services.²⁴ Furthermore, the Office of the Assistant General Counsel for Aviation Enforcement and Proceedings (Enforcement Office), within OST’s Office

²⁰49 U.S.C. §§ 40101(a)(6), (a)(12) (previously codified at 49 U.S.C. App. §§ 1301(a)(4), 1302(a)(9)). See also *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 378 (1992) (citing 49 U.S.C. App. §§ 1301(a)(4), 1302(a)(9)).

²¹49 U.S.C. § 41713(b).

²²This report does not discuss safety issues related to air ambulances but see [GAO-07-353](#) for our previous work in this area. Since then, in 2014, the Federal Aviation Administration enacted new safety requirements for air ambulance providers. See 79 Fed. Reg. 9932 (February 21, 2014) (codified at 14 C.F.R. Parts 91, 120, and 135).

²³See 49 U.S.C. § 41101. According to DOT, although all air ambulance providers must have economic authority from DOT, most, if not all, hold it in the form of an air taxi registration pursuant to 14 C.F.R. Part 298, rather than in the form of a certificate of public convenience and necessity.

²⁴See for example, DOT, *Guidelines for the Use and Availability of Helicopter Emergency Medical Transport*, April 2015.

of the General Counsel, has discretionary authority to investigate whether an air carrier, including an air ambulance provider, has been or is engaged in an unfair method of competition or an unfair or deceptive practice in air transportation or the sale of air transportation.²⁵

States are involved with air ambulances in several ways and some have taken action to bring awareness to air ambulance pricing. State emergency medical services offices are responsible for licensing medical services such as emergency medical technicians and ground and air ambulances. In addition, states have the authority to regulate the business of insurance and, as a part of this function, may review insurers' health insurance plans and premium rates.²⁶ Furthermore, each state administers and operates its Medicaid program, including setting payment rates, within broad federal requirements. States across the country have attempted to gather information or raise awareness regarding air ambulance pricing. For example, state governments have held hearings, including Maryland (2015) and Pennsylvania (2017); New Mexico recently completed a study, and Florida has convened a working group to examine air ambulance pricing issues.²⁷ Meanwhile Montana developed a public website that features "frequently asked questions" about air ambulance service and provides information on pricing and the extent of contracting with insurance by provider.²⁸

²⁵See 49 U.S.C. § 41712(a).

²⁶See 15 U.S.C. §§ 1011-1015.

²⁷New Mexico Office of Superintendent of Insurance, *Air Ambulance Memorial Study Report*, HM78/SM62 (January 2017).

²⁸See Commissioner of Securities & Insurance, Office of the Montana State Auditor, "Frequently Asked Questions," *Air Ambulances: What You Need to Know*, accessed June 2017, <http://csimt.gov/issues-reports/air-ambulance-what-you-need-to-know/>.

Median Prices Charged Approximately Doubled from 2010 to 2014, and Extent of Balance Billing Is Unknown

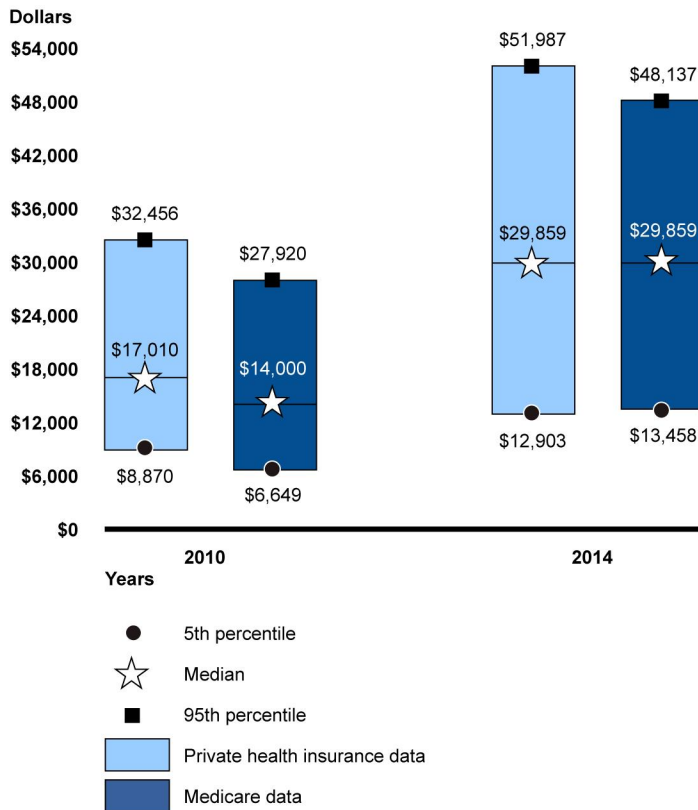
Median Prices Charged by Air Ambulance Providers Increased 76 to 113 Percent from 2010 to 2014

Between 2010 and 2014, the median prices charged for helicopter air ambulance service by providers approximately doubled. Specifically, according to Medicare data we analyzed, the median price providers charged for helicopter air ambulance transports increased 113 percent between 2010 and 2014. According to private health insurance data we analyzed, the median price charged increased 76 percent between 2010 and 2014 (see fig. 2). For comparison, the consumer price index increased by about 8.5 percent between 2010 and 2014.²⁹ In 2010, a transport priced at approximately \$30,000 was at the 95th percentile—meaning 95 percent of all prices charged were below that amount—according to both Medicare and private health insurance data. In 2014, a transport priced at the same amount—about \$30,000—was the median, or 50th percentile, of all prices charged according to these data, while a transport of approximately \$50,000 was at the 95th percentile. The increase in median prices charged from 2010 to 2014 may be part of a longer-term trend. For example, representatives from Air Methods, the largest air ambulance provider, reported that they have increased the average price charged per transport from \$13,000 in 2007 to \$49,800 in 2016—an increase of 283 percent over the past decade.³⁰

²⁹Over this time period, the medical care services component of the CPI increased by about 13 percent and the airline fares component of the CPI increased by about 10.5 percent.

³⁰These representatives noted the increase was needed to make up for an increased number of government-insured transports combined with a widening gap between government reimbursement and cost.

Figure 2: Prices Charged by Providers for Helicopter Air Ambulance Service, 2010 and 2014



Source: GAO analysis of data from the Health Care Cost Institute and the Centers for Medicare & Medicaid Services. | GAO-17-637

Notes: Private health insurance data from Health Care Cost Institute may not reflect amounts for all private sector payers.

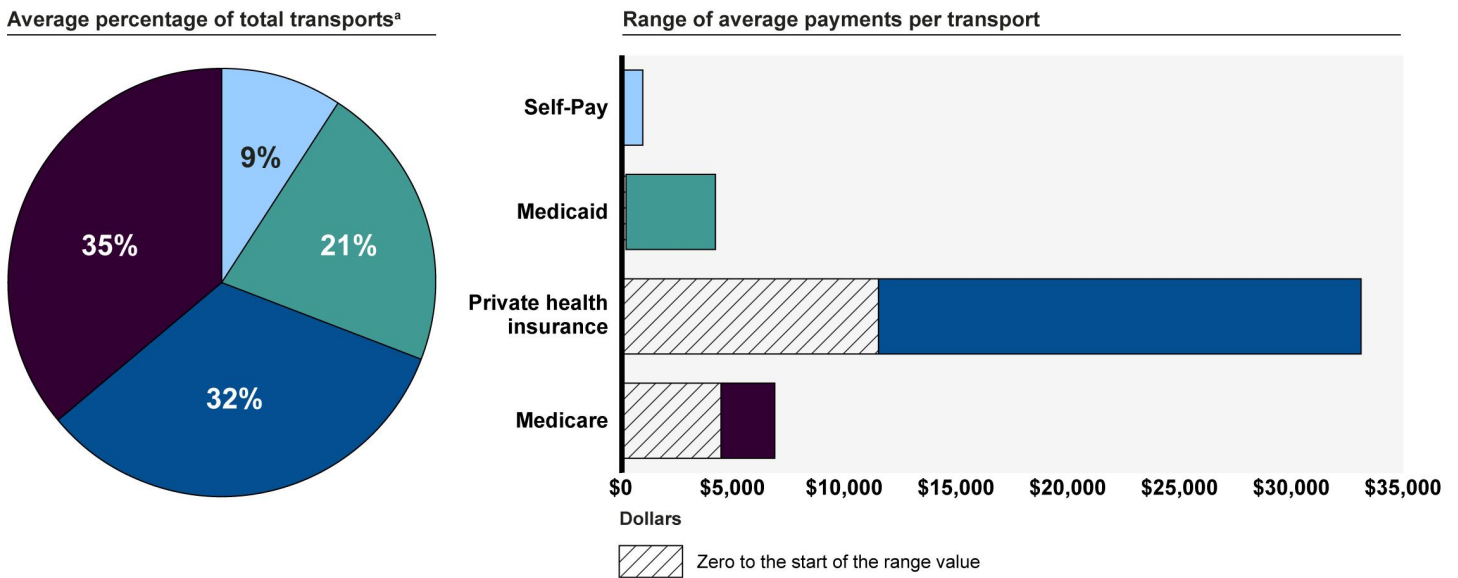
Percentiles indicate the percentage of prices charged that are below the stated amount, for example, 95 percent of prices charged fall below the 95th percentile.

Air Ambulance Providers Told Us Payments for Transports Are Often Lower than Prices Charged

Air ambulance transports, like many medical services, are generally paid at rates lower than the prices charged. Representatives from the eight providers we spoke to reported that transports of Medicare, Medicaid, and self-pay patients made up approximately 46 to 71 percent of their transports and were paid at particularly low rates. For example, according

to Medicare data, median payments per transport increased only slightly between 2010 and 2014—from \$6,267 in 2010 to \$6,502 in 2014.³¹ According to provider representatives, Medicaid and self-pay payments are often lower than Medicare payments.³² See figure 3 for information on the proportion of provider transports and range of average payment amounts by key payer as reported to us by the eight selected providers in 2016. In contrast to the payment received, these selected providers reported average prices charged ranging from \$13,200 to \$49,800 per transport in 2016.

Figure 3: Average Percentage of Selected Air Ambulance Providers’ Transports and Average Payments by Key Payer in 2016



Source: GAO analysis of information from selected providers. | GAO-17-637

Note: The eight selected providers were chosen to represent a range of business model types, sizes, and known perspectives in the industry and included three large independent providers and five hospital-affiliated providers.

³¹Like the median (or midpoint), the lower and upper ends of Medicare payments also increased only slightly between the years. In particular, the lower end payment was \$3,682 in 2010 and \$3,794 in 2014 and the upper end payment was \$8,277 in 2010 and \$8,727 in 2014. Lower end payments are at the 5th percentile and upper end payments are at the 95th percentile (percentiles indicate the percentage of payments that are below the stated amount; for example, 95 percent of payments fall below the 95th percentile).

³²We previously found that CMS does not have complete and reliable data needed to understand the payments states make to individual providers under Medicaid. See GAO, *Medicaid: Key Issues Facing the Program*, GAO-15-677 (Washington, D.C.: July 30, 2015).

^aPercentages do not add to 100 primarily because they are percentages averaged across the eight selected providers but also because some providers reported percentages that included a small “other” category, which we excluded, containing payers such as auto or military-sponsored insurance.

Representatives of the providers we spoke to said that privately insured patients account for the highest percentage of their revenue. For example, seven of the eight providers indicated that the majority of their transport revenue comes from privately insured patients, which accounted for a minority (22 to 41 percent) of their overall transports in 2016. According to an HCCI report, which includes data from three large, national private health insurers, the median payment these insurers paid per transport increased by 70 percent from 2010 to 2014, from about \$15,600 to \$26,600. As with prices charged, payment amounts increased in range between these years, with the upper end payment increasing more substantially than the lower end payment.³³ Although HCCI data includes approximately 40 million individuals with employer-sponsored insurance, according to an HCCI representative, patients in rural areas may be underrepresented in the data. Even though the HCCI data show private insurance payments increasing largely in parallel to price increases from 2010 to 2014, representatives from five of the eight providers we spoke to noted that payment rates from private insurance have been declining. Representatives from one provider noted that low payments from insurers occur in certain geographical areas, particularly rural areas, where one insurer covers a large proportion of the population and has a large share of the insurance market.

Extent to Which Air Ambulance Providers Balance Bill Patients Is Unknown Due to Lack of Data

National data on balance billing and on the extent to which providers are contracted with insurers are unavailable. Due to a lack of such information, it is unclear to what extent patients with private health insurance are billed by providers for the difference between the air ambulance price charged and the insurer’s payment (balance billing). Some states have attempted to collect balance billing information from patients. For example, Montana collected information on 39 instances of balance billing in 2015 and 2016. Likewise, Michigan reviewed 19 air

³³In particular, the lower end payment increased from \$5,533 in 2010 to \$6,902 in 2014 while the upper end payment increased substantially—from \$29,359 in 2010 to \$49,999 in 2014. Lower end payments are at the 5th percentile and upper end payments are at the 95th percentile (percentiles indicate the percentage of payments that are below the stated amount; for example, 95 percent of payments fall below the 95th percentile).

ambulance balance billing cases between 2013 and 2016 which had an average balance bill of about \$31,000.³⁴

³⁴Neither Montana nor Michigan distinguished fixed wing from rotor wing transports in these data, so these numbers include fixed wing transports.

Various Factors May Play a Role in Air Ambulance Prices, but Data Are Limited

According to Selected Providers, Transport Costs and Volume, Payer Mix, and Competition May Play a Role in Increased Prices Charged

Selected providers reported that factors such as transport costs and volume, payer mix, and competition play a role in prices charged.

Transport Costs and Volume

Costs to provide air ambulance transports are high and relatively fixed. For example, according to Air Methods representatives, to operate one air ambulance helicopter requires a staff of 13—4 pilots, 4 nurses, 4 paramedics, and a mechanic—in order to maintain around-the-clock readiness and be ready to deploy at any time. In contrast, helicopter tour operators would generally only need to employ a pilot for times when flights are arranged. Air ambulance providers' costs for air ambulance service are relatively fixed—meaning they do not increase significantly when they complete more transports. For example, personnel and the costs of helicopter ownership are the same regardless of how often the helicopter is used. Providers we spoke to noted that a small portion of their costs—such as fuel—are variable, meaning they increase with the number of transports completed. To be profitable, and thus be in business and provide service, providers must earn sufficient revenues to cover their costs, including their fixed costs. To increase revenue, a provider must increase its number of transports and/or its prices charged. When a provider has a lower transport volume, then that provider must earn higher prices on average across transports in order to be profitable. Representatives from the eight selected providers we spoke to reported average costs per transport, given current transport volumes, of \$6,000 to \$13,000 in 2016.

Representatives from the providers we spoke to agreed that average transport volume per helicopter has decreased but offered different perspectives on this change. According to the *Atlas & Database of Air Medical Services*, from 2010 to 2014, the number of air medical helicopters nationwide increased by more than 10 percent, from 900 to 1,020. Meanwhile, over the same time period, Medicare and HCCI data do not show a proportionate increase in the number of transports per

Medicare or private health insurance beneficiary. Specifically, from 2010 to 2014, the number of air ambulance transports per 1,000 patients was flat for Medicare and decreased slightly among privately insured patients represented in the HCCI data.³⁵ Representatives from three providers stated that there is an issue with overcapacity or oversaturation in the industry and that the helicopters being added to the industry are in areas with existing coverage and not serving additional demand, thereby reducing the average number of transports per helicopter rather than increasing access to patients previously not covered by the service. On the other hand, representatives from four other providers told us that the decrease in transports per helicopter is due to helicopters increasingly being located in rural areas where there is greater need, but less population density, leading to fewer transports per helicopter. As noted earlier, air ambulance providers are dispatched only in response to time-sensitive medical events so have limited control over transport volume once providing service to an area.

Payer Mix

Providers we spoke to said their mix of payers also affects prices charged. As noted earlier, providers reported that the majority of their revenue comes from private insurance. In order to increase this revenue from private insurance, providers must increase their prices charged. Representatives from six of the eight providers we spoke to said that they adjust prices charged to receive sufficient revenue from private health insurance to account for lower-reimbursed transports. Providers have limited ability to control the payer mix—the proportion of transports reimbursed by, for example, Medicare or private health insurance—as they do not turn away patients based on insurance coverage. Representatives from three providers report that the payer mix has shifted over time from private insurance to Medicare as the population ages. For example, one large independent provider reported a 13 percent shift in transport mix from private insurance to Medicare over a 10 year period, while a hospital-affiliated provider reported that since 2013, the percentage of its transports covered by Medicare has increased from 30 to 35 percent, while the percentage of privately insured patients has decreased from 39 to 33 percent. Price increases do not proportionately result in higher revenues when the majority of transports are paid at lower

³⁵Specifically, the number of transports per 1,000 Medicare patients was 1.8 in both 2010 and 2014. The number of transports per 1,000 privately insured patients decreased from 0.30 in 2010 to 0.26 in 2014, according to HCCI data.

fixed reimbursement levels. For example, representatives from one provider explained that to increase revenue 3 percent, they have to increase prices charged by 15 percent.

Competition

The overall competitive environment of the air ambulance industry may also play a role in air ambulance prices. As noted previously, patients do not have control over decisions allocating the use of emergency air ambulance service, such as the choice of air versus ground service or between providers. As a result, patients cannot avoid out-of-network air ambulance providers. In such an environment, providers may not lose transport volume as a result of raising prices or being out-of-network with private health insurance. Consequently, air ambulance providers are not subject to the price competition that typically occurs in competitive markets, where if prices are too high, consumers will find alternatives such as a lower-priced service or provider. Furthermore, the ADA preempts state-level regulation of prices, routes, and services of air carriers, including air ambulance providers. DOT's guidance notes that once DOT has granted economic authority to an air ambulance provider, "the competitive marketplace, rather than state regulations" controls the provider's prices, routes, and services.

Based on the eight selected providers we spoke to, the large independent providers may have higher prices and be less likely to contract with insurers than hospital-affiliated providers. Representatives from the three large independent providers we spoke to reported average prices charged per transport of over \$40,000 in 2016, while representatives from the five hospital-affiliated providers reported average prices that ranged from about \$13,000 to about \$31,000. In addition, representatives from the three large independent providers we spoke to noted they generally do not have contracts with insurers, which, as noted earlier, leaves patients vulnerable to balance billing. For example, representatives from one large independent provider noted that they have contracts in place with fewer than 10 of the approximately 1,000 private insurance payers they work with per year—in other words, around one percent. A representative from a large independent provider noted that being out of network with insurance is advantageous to the provider because a patient receiving a balance bill will ask for a higher payment from the insurance company, which often results in higher payment to the air ambulance provider than having a pre-negotiated payment rate with the insurer. On the other hand, a representative from a small hospital-affiliated provider told us that as a non-profit, they feel obligated to contract with the largest

insurer in their service area, in part because one of the hospitals the provider is affiliated with contracts with the insurer.

The nature of competition in the air ambulance industry may also be affected by the proportion of air ambulance helicopters operated by the three large independent providers, which is growing and may indicate increasing market concentration. Specifically, the three large independent providers reported operating 692 air ambulance helicopters in 2015 and 763 in 2016—an increase from about 66 to 73 percent of all helicopters in the industry.³⁶ This growth may be due to mergers and acquisitions. For example, in January 2016, Air Methods acquired Tri-State Care Flight, which had a fleet of 22 helicopters. In April 2017, the second largest air ambulance provider, Air Medical Group Holdings (AMGH) announced that it had agreed to acquire Air Medical Resource Group, adding 62 bases across 15 states to its business. In addition, the three large independent air ambulance providers are for-profit and increasingly owned by private equity firms. For example, the largest provider in the industry, Air Methods, a publicly traded company, announced in March 2017 that it had entered into an agreement to be acquired by a private equity firm for a total transaction value of approximately \$2.5 billion. Meanwhile AMGH is also held by a private equity firm and was purchased in 2015 for a reported \$2 billion.³⁷ The presence of private equity in the air ambulance industry indicates that investors see profit opportunities in the industry.

Lack of Data Limits Assessment of Factors Affecting Prices

Despite the above indications of factors that affect prices, an in-depth analysis of these factors is not possible due to lack of the following types of data.

- *Costs to provide service:* Data on providers' costs to provide service is not readily available. The Department of Health & Human Services has reported there is no national comprehensive database of

³⁶This percentage was calculated using the total number of air medical helicopters reported by the *Atlas & Database of Air Medical Services*, which was 1,045 in 2015 and 1,045 in 2016.

³⁷The third large independent provider—PHI Air Medical, L.L.C—is a wholly owned subsidiary of PHI, Inc., a publicly traded company.

ambulance service costs available.³⁸ Additionally, although the Centers for Medicare & Medicaid Services (CMS) has cost data for a portion of ambulance providers—those owned by hospitals—CMS found that these data had limitations, such as not distinguishing between air and ground ambulance transports.³⁹ Recently, a study on the costs to provide air ambulance service was prepared by Xcenda, a health care consulting firm, on behalf of the Association of Air Medical Services, an association of air ambulance providers, but this study has limitations.⁴⁰ The study notes its findings represent 51 percent of all air ambulance bases nationwide and therefore may not be generalizable to the whole industry. Representatives from four hospital-affiliated providers we spoke to noted they had declined to participate due to concerns over the study's independence and data security. Furthermore, according to Xcenda representatives, the study was designed to assess the adequacy of Medicare's air ambulance payment rates, which may give respondents an incentive to report high costs to justify higher Medicare payments.

- *Number of transports:* As noted above, transport volume is a key factor in determining the total revenues earned and costs incurred to provide service. The FAA Modernization and Reform Act of 2012 required that the FAA collect certain specified operations data for the air ambulance industry, including the number of annual transports, and report this information to Congress by 2014 and annually thereafter.⁴¹ In May 2017, FAA provided its first submission under the act to Congress. The submission contains a summary of data collected from helicopter air ambulance operators from April 1, 2015, to December 31, 2015.
- *Provider information, including business model type and established prices charged:* As noted above, the air ambulance industry may be increasingly concentrated, which could indicate a lack of competition in the industry such as relatively few providers setting prices for a large portion of the total market. However, industry-wide data are not available, such as prices charged by provider or providers' business

³⁸Department of Health and Human Services, *Evaluations of Hospitals' Ambulance Data on Medicare Cost Reports and Feasibility of Obtaining Cost Data from All Ambulance Providers and Suppliers*, (Washington, DC: September 2015).

³⁹CMS has cost data for less than 10 percent of ground and air ambulance providers, but the percentage of air ambulance providers alone is not known.

⁴⁰Xcenda, *Air Medical Services Cost Study Report*, (March 24, 2017).

⁴¹Pub. L. No. 112-95, § 306, 126 Stat. 11, 60 (2012).

model types (hospital-affiliated, independent, or hybrid). Industry information may become more difficult to obtain as private equity firms increasingly own air ambulance providers. For example, upon completion of the acquisition noted above, Air Methods—the largest provider in the industry—will no longer be required to submit periodic reports to the U.S. Securities and Exchange Commission as is required of publicly held corporations, thereby eliminating a key source of publicly available information on the industry. As a result of the lack of industry wide data, it is unknown how the approximately 73 percent of helicopters operated by the three large providers translates into market share. Likewise, it is difficult to assess the nature of competition in the industry or even determine relationships between providers, such as what entity sets pricing for a particular provider. As noted earlier, the helicopters operated by the large independent providers include those contracted to hospital-affiliated providers that set their own prices, as well as hybrid programs where the helicopter is branded as part of the hospital system, but where the independent provider sets the prices. For example, representatives from AMGH note that one of their subsidiaries—Air Evac Lifeteam—is not generally contracted with hospitals, but another AMGH subsidiary—Med-Trans—operates mostly hospital-affiliated bases. However, according to these representatives, AMGH handles its own pricing, billing, and collections across 97 percent of all of its bases.

Selected Stakeholders Proposed Actions Regarding Air Ambulance Pricing, Including Improved Data Collection and Transparency

The 26 stakeholders we interviewed identified three types of potential actions to address air ambulance pricing, as shown in table 2. Stakeholders expressed mixed views on two of these actions—modifying the ADA and raising Medicare rates. None disagreed with the third action of increased data collection for the purposes of investigations—such as unfair or deceptive practices—or increased transparency regarding prices.

Table 2: Views of 26 Selected Stakeholders Regarding Potential Federal Actions to Address Air Ambulance Prices

Potential action	Agree	Disagree	Did not specify
Congress modifies the Airline Deregulation Act as it pertains to the air ambulance industry to allow states to have more of an oversight role	13	8	5
Centers for Medicare & Medicaid Services raise Medicare rates across the board for air ambulance service	7	10	9
Department of Transportation increases data collection for investigations and/or increases pricing transparency	11	0	15

Source: GAO | GAO-17-637

Note: This table summarizes the opinions of the stakeholders GAO interviewed when asked about the potential actions to address air ambulance pricing issues. The most frequently cited potential actions are presented. These stakeholders were selected to represent a range of perspectives but are not generalizable to all air ambulance stakeholders.

Stakeholders Expressed Mixed Views on Proposed Solutions of Modifying the ADA or Medicare Payment Rates

Half of the 26 stakeholders we interviewed supported modifying or reevaluating the ADA as it pertains to the air ambulance industry in order to allow states to have more of an oversight role.⁴² Some stakeholders said that when the ADA was enacted in 1978, the air ambulance industry was in its infancy, and so the ADA was not formulated with the unique aspects of the air ambulance industry in mind. In addition, some stakeholders told us states are best suited to regulate air ambulance service, noting that states have an incentive to protect patients from large balance bills while also ensuring access to the service. Some states, such as North Dakota, have passed legislation designed to address air ambulance billing, legislation that has subsequently been struck down in court. In particular, in 2015, the North Dakota legislature passed a statute intended to protect patients from large balance bills. It required, among other things, that air ambulance providers submit documentation indicating that they are participating providers with health insurers in the state that cover a certain proportion of the state’s population in order to be listed on a “primary call list” for dispatching.⁴³ The state statute also

⁴²These 13 stakeholders included representatives from 2 air ambulance providers and 1 association representing such providers, 2 associations of state officials, 3 states, 3 groups familiar with air ambulance business and billing, 1 group involved with consumer policy or research, and 1 association representing insurers.

⁴³H. B. 1255, 64th Leg. Assemb., Reg. Sess. (N.D. 2015).

required that air ambulance providers make their fee schedules available to certain requesters, including potential patients, upon request. However, the state statute was challenged in federal district court and in March 2016, the U.S. District Court for the District of North Dakota struck it down as being preempted, ruling that the call list requirement was “precisely the type of state regulation Congress sought to prevent...in the ADA.”⁴⁴ North Dakota officials said they would like to see the ADA modified so they could implement such legislation. Subsequent to the ruling, North Dakota enacted a new statute in 2017 which is designed to increase transparency regarding an air ambulance provider’s health insurance network status in non-emergency situations.⁴⁵ North Dakota officials we spoke to noted that the most recent legislation, which was signed by the governor in April 2017, will likely be challenged in court.

Eight stakeholders opposed modifying the ADA and seven instead suggested raising Medicare rates as an approach to addressing high air ambulance prices.⁴⁶ An air ambulance provider association noted that modifying the ADA could create a “patchwork” of regulations nationwide, disrupting the regulatory certainty the industry has been built upon. This association also noted that since air ambulance providers do not turn away patients based on their ability to pay, providers have limited options to cover their costs. Two stakeholders noted that increased Medicare rates would reduce the need for air ambulance providers to increase prices, thereby alleviating pressure on patients with private health insurance.

Although raising Medicare rates across the board for air ambulance service is being promoted by some stakeholders, particularly the large independent providers, 10 other stakeholders we spoke with disagreed with this approach as a solution to addressing air ambulance pricing issues. Raising air ambulance Medicare rates is being promoted through a national campaign sponsored by several providers and a key industry association which supports legislation to raise air ambulance Medicare

⁴⁴*Valley Med Flight, Inc. vs. Dwelle*, 171 F. Supp. 3d 930, 941 (D.N.D., 2016).

⁴⁵S. B. 2231, 65th. Leg. Assemb., Reg. Sess. (N.D. 2017).

⁴⁶The eight stakeholders that opposed modifying the ADA included four providers, three groups familiar with air ambulance business and billing, and one association representing providers. The seven stakeholders supporting raising Medicare rates as a solution were four providers, two groups familiar with business and billing, and one association representing providers.

rates.⁴⁷ Meanwhile, 10 stakeholders we spoke with—2 providers, 1 association representing providers, 4 groups familiar with air ambulance business and billing, 1 selected state, 1 association of state officials, and 1 insurance association—disagreed with raising Medicare rates as a way to address balance billing. Some of these stakeholders noted that increasing Medicare rates could incentivize further growth in the industry, which could reduce the average number of transports per helicopter, putting pressure on providers to increase prices charged—thereby exacerbating the problem. Further, industry growth may be an indication that Medicare rates are not too low. We have previously reported that when rates are set too low, access to appropriate care for patients covered by Medicare may be adversely affected.⁴⁸ However, the growth in the number of air ambulance helicopters indicates that providers are still deciding to provide service under existing Medicare rates.

Some Stakeholders Suggest Data Collection and Price Transparency Could Better Inform DOT and Stakeholder Actions

Five of the 26 stakeholders we spoke to—including three groups familiar with air ambulance business and billing and two providers—told us that DOT should collect information to better understand the air ambulance industry. In addition, the federal standards for internal control state that management should identify information needed to achieve objectives and address risks. Such risks in the air ambulance industry could include:

- *Matters related to industry concentration:* The ADA provides that in carrying out its economic regulation authorities, DOT should consider, among other things “avoiding unreasonable industry concentration,” when determining what is in the public interest and consistent with public convenience and necessity.⁴⁹ As noted earlier, three large air ambulance providers operate 73 percent of the total helicopters in the industry in 2016, although the extent to which this translates into market share is unknown.

⁴⁷Save Our Air Medical Resources, accessed June 2017, <http://www.soarcampaign.com>.

⁴⁸GAO, *High-Risk Series: Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others*, GAO-17-317 (Washington, D.C.: February 15, 2017), “Medicare Program” 520.

⁴⁹See 49 U.S.C. § 40101(a)(10).

- *Unfair or deceptive practices:* DOT could potentially use such information to investigate concerns or complaints of unfair or deceptive practices, which, as noted previously, DOT through its Enforcement Office has discretionary authority to investigate.⁵⁰

An official from DOT's Enforcement Office noted that DOT has not exercised its discretionary authority to investigate air ambulance providers.⁵¹ DOT officials noted that DOT needs additional information about the overall industry and that there is a dearth of information about the industry generally. For example, the officials told us DOT has received very few air ambulance complaints. In particular, the officials said they searched their database and found a small number of complaints since 2006. DOT officials noted they believe the small number of complaints may be due to consumers not thinking of DOT when encountering issues with air ambulance pricing, and instead filing complaints with other entities such as their health insurance or state department of insurance. As noted earlier, some states have collected such information—for example together Michigan and Montana collected 58 instances of balance billing since 2013. For the commercial airline industry, which is also subject to the ADA, DOT's Enforcement Office gives consumers multiple options for filing airline service complaints, including through an online form that allows users to select from an extensive drop-down menu of U.S. and foreign air carriers. In May 2017, DOT added "air ambulance (all)" as an option on the online complaint form, with a field to manually enter an air ambulance provider's name. However, the DOT website does not have online instructions on how to file air ambulance complaints. DOT's Enforcement Office has a website with information such as how to file a complaint (by phone, mail, or online), what types of complaints to file (those about service other than safety or security issues), and how DOT uses the submitted information. It is unclear how, if at all, such information applies to air ambulance complaints. For example, DOT officials noted they would like consumers to know the boundaries of DOT's jurisdiction regarding air ambulance service. Without communicating this and other aspects such as how to file an air ambulance complaint, DOT has limited ability to understand the

⁵⁰See 49 U.S.C. § 41712(a).

⁵¹However, DOT has taken enforcement actions against indirect air ambulance providers for deceptive practices. For example, DOT's Enforcement Office has issued consent orders against indirect air ambulance providers whose advertising contained statements that "reasonably could have led a consumer to conclude that the provider was a direct air ambulance provider." As noted previously, this report is focused on direct air ambulance providers.

industry including the nature of competition that could affect its decisions on whether to pursue investigations into potential unfair or deceptive practices.

Some selected stakeholders suggested increased price transparency as a solution to address air ambulance pricing issues. In particular, nine stakeholders we spoke to—two providers, two groups familiar with air ambulance business and billing, two insurance associations, two selected states, and one group involved with consumer policy or research—noted that price transparency could provide benefits to providers and the industry, patients, insurance companies and other payers, hospitals, and first responders. Furthermore, the federal standards for internal control state that management should externally communicate information needed to achieve objectives and address risks. According to a DOT official, DOT enforces disclosure requirements due to the ADA's focus on competitive market forces, which relies on consumers having accurate and timely information on which they can make decisions. For example, for commercial airlines, DOT's Enforcement Office compiles a monthly *Air Travel Consumer Report* that includes consumer complaints submitted to DOT and is made available to the general public so consumers and others can compare the complaint records of individual airlines. Such consumer disclosure requirements are intended to enable consumers to make informed decisions on tradeoffs when selecting flights, considering such factors as provider, service quality, and price. DOT officials noted that air ambulance providers have not yet been included in the *Air Travel Consumer Report* but may be included if a provider reaches a certain threshold such as five complaints received in a month. However, as mentioned above, air ambulance patients may be unaware that they can file complaints with DOT. Furthermore, DOT lacks industry information to group complaints together and to identify patterns, particularly for large nation-wide providers which, as mentioned previously, operate across many states and may set prices for hybrid programs where the helicopter may be branded with a hospital's name rather than the large provider's name. Without more industry information, DOT is unable to put any such complaints into the context of the overall industry, both for the purposes of potentially investigating unfair and deceptive practices and for accurately compiling complaints for public reporting.

Although DOT has required consumer disclosures for the commercial airline industry, it has not done so for the air ambulance industry, such as disclosing to patients the prices charged for services. For example, DOT

has recently issued a final rule that, among other things, requires air carriers to disclose when flights involve any code-sharing⁵² arrangements and a supplemental notice of proposed rulemaking regarding the disclosure of baggage fees wherever fare and schedule information is provided to consumers.⁵³ DOT officials note they have not made such requirements for the air ambulance industry due in part to the emergency nature of air ambulance transports. In particular, DOT officials questioned the value of consumer disclosure requirements for the air ambulance industry given that patients have little to no choice or ability to “shop.” However, a representative from a group involved with consumer policy or research noted that it is important that the public understands the price variation that exists among air ambulance providers, along with any potential limits of their insurance coverage. Furthermore, patients are not the only “consumers” of air ambulance service. Other stakeholders make decisions regarding air ambulance service such as insurance companies that pay for transports or hospitals and first responders that initiate transports. According to a representative from an association of insurers, transparency is the first step toward a rational approach to air ambulance costs—all stakeholders need to know such fundamental aspects as average prices charged, transport frequency, and the amount insurance and patients may pay. Without such information, stakeholders may not be able to make decisions that serve the patients’ best interest. For example, if hospital staff had information on the extent to which providers in the area were contracted with insurance, such staff may make more informed decisions in selecting providers that best serve the financial interests of the patient while still maintaining the same level of care.

Conclusions

The ADA largely deregulated the domestic air carrier industry, including the air ambulance industry, and was intended to promote reliance on competitive market forces in order to best further quality service at low prices, among other things. Despite growth in the number of helicopters offering air ambulance service in recent years, lower air ambulance prices

⁵²Code sharing is a marketing arrangement in which an airline places its designator code on a flight operated by another airline and sells tickets for that flight.

⁵³Transparency of Airline Ancillary Service Fees, 82 Fed. Reg. 7536 (Jan. 19, 2017). On March 14, 2017, DOT suspended the public comment period for the supplemental notice of proposed rulemaking to allow the new administration to review and consider the action. 82 Fed. Reg. 13572 (Mar. 14, 2017).

have not materialized. In fact, air ambulance prices have increased—approximately doubling between 2010 and 2014—and large providers report average prices charged of over \$40,000 per transport in 2016. These increases pose risks to privately insured patients who may be held responsible by the provider for a portion of these charges (balance billing). Despite media reports of balance billing, DOT officials note they have received very few air ambulance complaints since 2006, possibly because consumers do not think of DOT as a place to file such complaints. DOT recently modified its online form to include air ambulance complaints, but the website does not have instructions on how to file such a complaint. Without taking such steps, DOT is missing potential information both for its understanding of the industry and for public disclosure to enable informed decision making. Furthermore, DOT lacks data needed to assess several key aspects of the industry, ranging from basic aspects—such as the composition of the industry by provider type, prices charged by provider, or number of overall air ambulance transports—to the more complex, such as the extent of contracting between providers and insurers or extent of balance billing to patients. However, information from the eight selected providers we interviewed indicate concerning trends about the nature of competition in the industry, such as increasing prices and growing concentration of the market among three large providers. Further, the increasing role of private equity in the industry could further exacerbate these trends while also reducing transparency. Without better information, DOT has limited ability to understand the industry including the nature of competition that could affect its decisions on whether to take investigative or enforcement actions. Likewise, without information on the industry and pricing, stakeholders such as hospital staff have limited ability to make air ambulance decisions, such as selecting a provider that best serves the patient’s financial interests without compromising the medical benefits air ambulance transports provide.

Recommendations for Executive Action

To increase transparency and obtain information to better inform decisions on whether to investigate potentially unfair or deceptive practices in the air ambulance industry, we recommend the Secretary of Transportation take the following four actions:

- Communicate a method to receive air ambulance-related complaints, including those regarding balance billing, such as through a dedicated web page that contains instructions on how to submit air ambulance

complaints and includes information on how DOT uses the complaints.

- Take steps, once complaints are collected, to make pertinent aggregated complaint information publicly available for stakeholders, such as the number of complaints received by provider, on a monthly basis.
- Assess available federal and industry data and determine what further information could assist in the evaluation of future complaints or concerns regarding unfair or deceptive practices.
- Consider consumer disclosure requirements for air ambulance providers, which could include information such as established prices charged, business model and entity that establishes prices, and extent of contracting with insurance.

Agency Comments and Our Evaluation

We provided a draft of this report to DOT and CMS for review and comment. CMS and DOT provided technical comments which we incorporated as appropriate. In written comments provided by DOT (see app. II), DOT agreed with three of our recommendations but did not concur with our recommendation that DOT assess available federal and industry data and determine what information could assist in the evaluation of future complaints or concerns regarding unfair or deceptive practices. DOT noted that its analysis of a given complaint is based on the unique facts of each individual case, rather than on aggregate data. Therefore, DOT noted it does not believe an assessment of federal or industry data would yield information relevant to its determinations in future cases. We appreciate DOT's comments; however, we believe that this recommendation is justified. As we note in the report, the federal standards for internal control state that management should identify information needed to achieve objectives and address risks. DOT has discretionary authority to investigate air ambulance providers but to date has not done so. Although collecting consumer complaints will help DOT identify areas for further investigation, further information will help put complaints into the context of the larger industry. DOT is currently limited in its ability to conduct such an analysis for the air ambulance industry due to data limitations noted in our report, involving such basic elements as relationships between providers including what entity sets prices or the given market share or number of transports per provider. As we noted in the report there has been some efforts to collect data, such as FAA's efforts regarding the number of transports. These and other data are

potential sources for DOT to better understand the helicopter air ambulance industry and evaluate whether consumer complaints indicate larger patterns of unfair and deceptive practices.

We are sending copies of this report to the Secretary of the Department of Transportation, the CMS Administrator, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-2834 or dillinghamg@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 major contributions to this report are listed in appendix III.



Gerald L. Dillingham, Ph.D.
Director, Physical Infrastructure Issues

Appendix I: Objectives, Scope, and Methodology

For this work we examined: (1) what is known about the prices charged for air ambulance service, (2) what is known about the factors that affect the prices charged for air ambulance service, and (3) what actions, if any, selected stakeholders believe the federal government should take regarding air ambulance pricing.

To describe what is known about air ambulance prices charged, we analyzed and assessed the reliability of information on prices charged and amount paid for 2010 and 2014 from Medicare claims data from the Centers for Medicare & Medicaid Services (CMS) and private health insurance data published by the Health Care Cost Institute (HCCI).¹ Although HCCI data include data from three large national insurers and includes approximately 40 million individuals with employer-sponsored insurance, the data may not be generalizable to all privately insured patients. The years 2010 and 2014 were selected as they were the furthest back year and the most recently available year from HCCI, could be compared across both data sets, and allowed us to analyze changes over time. The price charged is the amount providers claim for two components: (1) the transport and (2) each mile that the patient is transported. The amount paid is the total amount allowed by the payer (i.e., the private insurer or Medicare); the patient may be responsible for a portion of that total amount through copays or deductibles. For Medicare, we excluded claims without both the transport and mileage components and excluded claims with mileage amounts over the 99th percentile.

To address possible issues with payments by secondary payers, we excluded claims where the payment amount was less than 10 percent of the price charged and claims that otherwise may have indicated a secondary payer. We also excluded any claims for transports with multiple patients or where an ambulance was dispatched but the patient died before being transported; these types of transports are paid at reduced rates. We also excluded outliers based on the price charged—excluding claims that were above the 99th percentile or below the 1st percentile for that year. We assessed the reliability of the data published

¹See HCCI, *Data Brief: Non-Shoppable Health Care Services: Inpatient Hospitalizations*, February 2017, 9-10.

by HCCI by reviewing related documentation, discussing the methods used with knowledgeable officials, performing data reliability checks, and comparing the findings to published information, and we determined the data were sufficiently reliable for the purposes of this report. Medicare claims data, which are used by the Medicare programs as a record of payments made to health care providers, are closely monitored by both CMS and contractors that process, review, and pay claims for Medicare-covered services. The data are subject to various internal controls, including checks and edits performed by the contractors before claims are submitted to CMS for payment approval. Although we did not review these internal controls, we assessed the reliability of Medicare claims and enrollment data by reviewing related CMS documentation and comparing our results to published sources. We determined that the Medicare claims and enrollment data were sufficiently reliable for the purposes of our reporting objectives.

To describe what is known about the factors affecting prices of air ambulance service, we also reviewed previous reports on costs to provide air ambulance service from the Department of Health and Human Services and by the contractor Xcenda as commissioned by the Association of Air Medical Services. We also interviewed eight selected providers and other stakeholders (as described below) regarding the prices and costs associated with their service and factors affecting prices and costs. To gauge the scope of the air ambulance industry, we also analyzed available information from the *Atlas & Database of Air Medical Services, 2010—2016*. Lastly, we interviewed representatives from associations regarding the costs to operate air ambulance and other on-demand air services, including the Helicopter Association International, Air and Surface Transport Nurses Association, National EMS Pilots Association, and International Association of Flight & Critical Care Paramedics. These associations were selected because they represent major cost categories of providing air ambulance service, including the aircraft and personnel.

To describe potential federal government actions to address the issue of air ambulance pricing, we reviewed documentation and interviewed officials from U.S. Department of Transportation (DOT) and the Department of Health & Human Services' Centers for Medicare & Medicaid Services (CMS). In particular, we reviewed CMS documents regarding Medicare payments for air ambulance transports. We reviewed pertinent laws and regulations and DOT guidance, enforcement actions, and legal opinions, such as the Airline Deregulation Act of 1978, the federal statute (49 U.S.C. § 41712(a)) providing DOT the authority to

investigate unfair and deceptive practices, and whether there were any actions by the DOT Enforcement Office regarding air ambulances. We also reviewed DOT Enforcement Office activities regarding commercial airlines, such as the consumer complaint online web form. We compared DOT's practices and procedures for aspects of its air ambulance oversight to federal internal control standards related to information collection and external communication.²

To describe stakeholder views on potential federal actions, we selected and interviewed 26 stakeholders, including representatives from: 8 air ambulance providers (3 large independent providers and 5 hospital-affiliated providers); 2 associations representing air ambulance providers; 6 groups familiar with air ambulance business and billing such as analysts and consultants; 4 states active in assessing air ambulance costs and prices charged; 2 associations of state officials; 2 associations representing health insurers; and 2 groups involved with consumer policy or research. Although these selected stakeholders are not generalizable to all air ambulance stakeholders, they were selected to represent a range of perspectives. For example, we selected air ambulance providers that represented a range in business model types (hospital-affiliated and independent), a range of sizes (large and small), a range of known perspectives in the industry, and geographical dispersion. There are no available data on all providers that indicates industry-wide characteristics, such as a breakdown of providers by business model type or size. In addition, we selected stakeholders familiar with air ambulance business billing to capture expertise on business aspects and also a range of views; and selected states active in assessing air ambulance prices and costs and, to the extent possible, geographically dispersed.

²GAO, *Standards for Internal Control in the Federal Government*, [GAO-14-704G](#) (Washington, D.C.: September 2014).

Appendix II: Comments from the Department of Transportation



U.S. Department
of Transportation
**Office of the Secretary
of Transportation**

Assistant Secretary
for Administration

1200 New Jersey Avenue, SE
Washington, DC 20590

Gerald L. Dillingham
Director, Physical Infrastructure Issues
U.S. Government Accountability Office (GAO)
441 G Street NW
Washington, DC 20548

JUL 13 2017

Dear Mr. Dillingham:

The U.S. Department of Transportation is committed to ensuring that air carriers, including air ambulances, treat consumers fairly. The Department uses its authority to prohibit unfair or deceptive practices in air transportation and the sale of air transportation to monitor and sanction such practices by air carriers. While the Department has authority under the unfair or deceptive practices statute for actions by air ambulances related to air transportation, States are responsible for regulating medical services and the business of insurance. Further, the Department has limited authority and States are preempted under the Airline Deregulation Act from regulating the prices, routes, or services of an air carrier in interstate air transportation. The result is that the Department may regulate only certain aspects of an air ambulance's air transport operations, such as ensuring that its operations or any claims it makes to the public about those operations are not unfair or deceptive, and the Federal Aviation Administration regulates to ensure safety of those operations. However, the Department cannot regulate where the air ambulance offers its services, what it charges for them, or from whom it seeks payment.

Upon review of GAO's draft report, we concur with recommendations 1, 2, and 4. Although we will provide a detailed response to each of these recommendations within 60 days of the final report's issuance, we note that the nature of the information collected pursuant to implementing recommendations 1 and 2 may have a limited effect on price discipline in the air ambulance industry or change the way air ambulances bill for their services, since prices and billing practices may be related substantially to the cost of medical services and insurance reimbursement rates, as well as high capital costs of running an air carrier. With respect to recommendation 4, we are concerned about the effectiveness of disclosure requirements for a significant portion of the industry's operations, specifically transporting patients in emergencies.

We do not concur with recommendation 3. In determining whether a complaint alleges conduct that could constitute an unfair or deceptive practice, our analysis is fundamentally based on the unique facts of each individual case, rather than on aggregate data. Accordingly, we do not believe an assessment of federal or industry data would yield information relevant to our determinations in future cases.

We appreciate the opportunity to respond to the GAO draft report. Please contact Madeline M. Chulumovich, Audit Relations and Program Improvement, at (202) 366-6512 with any questions or if you would like to obtain additional details.

Sincerely,

Bryan Slater
Assistant Secretary for Administration

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Gerald L. Dillingham, Ph.D., (202) 512-2834 or dillinghamg@gao.gov

Staff Acknowledgements

In addition to the contact named above, Heather MacLeod (Assistant Director), Melissa Bodeau, Stephen Brown, Christine Brudevold, James Cosgrove, Danielle Ellingston, Geoff Hamilton, Corissa Kiyon-Fukumoto, Emily Larson, Malika Rice, Oliver Richard, Daniel Ries, Daniela Rudstein, and Monica Savoy made key contributions to this report.

Appendix IV: Accessible Data

Data Tables

Data Table for Figure 2: Prices Charged by Providers for Helicopter Air Ambulance Service, 2010 and 2014

	2010		2014	
	Private health insurance data	Medicare data	Private health insurance data	Medicare data
5th percentile	\$8,870	\$6,649	\$12,903	\$13,458
Median	\$8,140	\$7,351	\$16,956	\$16,401
95th percentile	\$15,446	\$13,920	\$22,128	\$18,278

Data Table for Figure 3: Average Percentage of Selected Air Ambulance Providers' Transports and Average Payments by Key Payer in 2016

	Average percentage of total transports	Range of average payments per transport
Self-Pay	9%	\$0-999
Medicaid	21%	\$240-\$4,240
Private health insurance	32%	\$11,533-\$33,125
Medicare	35%	\$4,493-\$6,893

Agency Comment Letter

Text of Appendix II: Comments from the Department of Transportation

Gerald L. Dillingham

Director, Physical Infrastructure Issues

U.S. Government Accountability Office (GAO) 441 G Street N W

Washington , DC 20548

JUL 13 2017

Dear Mr. Dillingham:

The U.S. Department of Transportation is committed to ensuring that air carriers, including air

ambulances, treat consumers fairly. The Department uses its authority to prohibit unfair or deceptive practices in air transportation and the sale of air transportation to monitor and sanction such practices by

air carriers. While the Department has authority under the unfair or deceptive practices statute for actions by air ambulances related to air transportation, States are responsible for regulating medical services and the business of insurance. Further, the Department has limited authority and States are preempted under the Airline Deregulation Act from regulating the prices, routes, or services of an air carrier in interstate air transportation. The result is that the Department may regulate only certain aspects of an air ambulance's air transport operations, such as ensuring that its operations or any claims it makes to the public about those operations are not unfair or deceptive, and the Federal Aviation Administration regulates to ensure safety of those operations. However, the Department cannot regulate where the air ambulance offers its services, what it charges for them, or from whom it seeks payment.

Upon review of GAO's draft report, we concur with recommendations 1, 2, and 4. Although we will provide a detailed response to each of these recommendations within 60 days of the final report's issuance, we note that the nature of the information collected pursuant to implementing recommendations 1 and 2 may have a limited effect on price discipline in the air ambulance industry or change the way air ambulances bill for their services, since prices and billing practices may be related substantially to the cost of medical services and insurance reimbursement rates, as well as high capital costs of running an air carrier. With respect to recommendation 4, we are concerned about the effectiveness of disclosure requirements for a significant portion of the industry's operations, specifically transporting patients in emergencies.

We do not concur with recommendation 3. In determining whether a complaint alleges conduct that could constitute an unfair or deceptive practice, our analysis is fundamentally based on the unique facts of each individual case, rather than on aggregate data. Accordingly, we do not believe an assessment of federal or industry data would yield information relevant to our determinations in future cases.

We appreciate the opportunity to respond to the GAO draft report. Please contact Madeline M. Chulumovich, Audit Relations and Program

Improvement, at (202) 366-6512 with any questions or if you would like to obtain additional details.

Bryan Slater

Assistant Secretary for Administration

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's website (<http://www.gao.gov>). Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. To have GAO e-mail you a list of newly posted products, go to <http://www.gao.gov> and select "E-mail Updates."

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <http://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [LinkedIn](#), [Twitter](#), and [YouTube](#).
Subscribe to our [RSS Feeds](#) or [E-mail Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at www.gao.gov and read [The Watchblog](#).

To Report Fraud, Waste, and Abuse in Federal Programs

Contact:

Website: <http://www.gao.gov/fraudnet/fraudnet.htm>
E-mail: fraudnet@gao.gov
Automated answering system: (800) 424-5454 or (202) 512-7470

Congressional Relations

Katherine Siggerud, Managing Director, siggerudk@gao.gov, (202) 512-4400,
U.S. Government Accountability Office, 441 G Street NW, Room 7125,
Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

James-Christian Blockwood, Managing Director, spel@gao.gov, (202) 512-4707
U.S. Government Accountability Office, 441 G Street NW, Room 7814,
Washington, DC 20548