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INSPECTOR GENERAL**

SERVICES PROVIDED BY CRITICAL ACCESS HOSPITALS IN 2011

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EXECUTIVE SUMMARY: SERVICES PROVIDED BY CRITICAL ACCESS HOSPITALS IN 2011
OEI-05-12-00081

WHY WE DID THIS STUDY

The Critical Access Hospital (CAH) certification was created to ensure that rural beneficiaries are able to access hospital services. For most services provided, Medicare reimburses CAHs at 101 percent of their costs rather than at the rates set by the prospective payment systems or fee schedules. In 2011, Medicare and beneficiaries paid approximately $8.5 billion for services provided at CAHs.

CAHs are required to provide broad classes of services, including inpatient and outpatient services, but have latitude in what specific types of services they provide. They can also provide optional services such as "swing bed" services, which are the equivalent of skilled nursing services.

The purpose of this report is to aid policymakers and regulators as they consider the future role of CAHs in the delivery of hospital services. The Office of Inspector General has recommended that policymakers reevaluate which facilities are certified as CAHs. In addition, the Administration has proposed to decertify some CAHs and change how remaining CAHs are paid.

HOW WE DID THIS STUDY

We analyzed 2011 enrollment data; inpatient and outpatient claims data; and cost report data to determine what types of services CAHs provided and the extent to which Medicare and other patients utilize these services. To provide perspective, we compared services and service utilization at CAHs to that within acute-care hospitals, broken out by hospital size.

WHAT WE FOUND

In 2011, CAHs provided outpatient services and, to a lesser extent, inpatient services to approximately 5 percent of all Medicare beneficiaries. At CAHs, more than eight times as many Medicare beneficiaries visited outpatient departments as visited inpatient departments. Compared to beneficiaries who received care at acute-care hospitals, a slightly higher percentage of beneficiaries who received services at CAHs received outpatient services. The outpatient services provided by CAHs were from a wide array of hospital departments. Laboratory services were the most commonly provided outpatient service at both CAHs and acute-care hospitals.

CAHs' inpatient beds, which are limited to a maximum of 25 at each CAH, were not heavily utilized. In 2011, patients used approximately one of every five available CAH inpatient beds. When Medicare beneficiaries did receive inpatient services at CAHs, the services provided did not often include operating-room procedures. In addition, more CAHs used their inpatient beds for swing-bed services (i.e., services that beneficiaries would receive in a skilled nursing facility, such as nursing care and rehabilitative therapies) than did all acute-care hospitals. On average, CAHs used 10 percent of their available inpatient beds to provide swing-bed services, while acute-care hospitals used 4 percent of their available inpatient beds.

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OBJECTIVE

To provide information for policymakers to consider while reassessing how Critical Access Hospitals (CAHs) should be certified and paid, including:

a. the types of services provided at CAHs in 2011;

b. how the types of services provided at CAHs in 2011 compared to the types of services provided at acute-care hospitals in 2011; and

c. how much Medicare paid for services provided at CAHs in 2011.

BACKGROUND

The purpose of this report is to aid policymakers as they consider the future role of CAHs in the delivery of hospital services. The Office of Inspector General (OIG) has recommended that policymakers reevaluate which facilities are certified as CAHs. In addition, the Administration has proposed to decertify some CAHs and change how remaining CAHs are paid.

Critical Access Hospitals

In 1997, the Balanced Budget Act created the CAH certification to ensure that hospital care is accessible to beneficiaries in rural communities.[1, 2] The CAH certification replaced designations for several other types of rural hospitals, including the essential access community hospital, the rural primary care hospital, and the Montana medical assistance facilities, all of which had similar features.[3] Hospitals that meet specific requirements can qualify for the CAH certification and receive favorable Medicare reimbursements.

In 2011, 1,329 CAHs were located in 45 States. These CAHs were predominantly located in small, rural towns, with most owned by nonprofit organizations such as private nonprofit companies; local hospital

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1 Balanced Budget Act (BBA) of 1997, P.L. 105-33 § 4201. The BBA amended several sections of the Social Security Act, including sections 1820, 1861(mm), 1814(l), and 1834(g).

2 Centers for Medicare & Medicaid Services (CMS), *State Operations Manual*, Pub. No. 100-07, ch. 2, § 2254A. Accessed at http://cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs.html (chapter-specific URL: http://cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/som107c02.pdf) on July 7, 2011.

3 MedPAC, *Report to the Congress: Medicare in Rural America*, June 2001. Accessed at http://www.medpac.gov/documents/jun01%20entire%20report.pdf on September 27, 2013.

districts or authorities; and Federal, State, and local governments. Nearly 40 percent of these CAHs were located in seven States, including Illinois, Iowa, Kansas, Minnesota, Nebraska, Texas, and Wisconsin. See Appendix A for a map detailing the number of CAHs in each State.

In 2011, there were approximately 49 million Medicare beneficiaries.[4] CAHs served approximately 5 percent, or 2.3 million, of these beneficiaries, including 2 percent who received hospital services only at CAHs and 3 percent who received hospital services at both CAHs and acute-care hospitals. Medicare and beneficiaries paid approximately $8.5 billion for services provided at CAHs.

Medicare Payments to CAHs

CMS pays CAHs under a different payment system than most acute-care hospitals. CAHs receive 101 percent of their "reasonable costs" for most services provided.[5,6] CMS determines these costs using information from CAHs' cost reports.[7] CMS pays most acute-care hospitals using inpatient and outpatient prospective payment systems (IPPS and OPPS), which pay predetermined rates for treating beneficiaries.[8,9] Inpatient services are paid for based on the patients' diagnoses, while outpatient services are paid for based on the services provided.

Like other Medicare beneficiaries, beneficiaries who receive services at CAHs are responsible for paying a deductible and coinsurance for some outpatient services, such as office and emergency room visits and minor procedures.[10] Coinsurance for outpatient services provided at CAHs is typically equal to 20 percent of the reasonable charges.[11] Medicare beneficiaries generally do not pay coinsurance for other outpatient services, such as laboratory services and certain preventive outpatient services.[12]

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[4] CMS, *The Medicare and Medicaid Statistical Supplement, 2012 Edition.* Accessed at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/2012.html on August 27, 2013.

[5] Social Security Act, §§ 1814(l) and 1834(g), 42 U.S.C. §§ 1395(l) and 1395m(g).

[6] "Reasonable costs" are the direct and indirect costs associated with providing services to Medicare beneficiaries. 42 CFR § 413.9(b)(1).

[7] Cost reports are annual reports submitted by providers to Medicare that list providers' costs and charges for delivering healthcare services.

[8] Social Security Act, § 1886(d) and (g), 42 U.S.C. § 1395ww(d) and (g).

[9] Social Security Act, § 1833, 42 U.S.C. § 1395l.

[10] Social Security Act, § 1866(a)(2)(A), 42 U.S.C. § 1395cc(a)(2)(A).

[11] Ibid.

[12] Social Security Act, § 1833(a)(1), 42 U.S.C. § 1395l(a)(1).

Medicare Requirements for CAH Certification

Facilities must meet the requirements set forth in the CAH Conditions of Participation to receive the CAH certification. Conditions of Participation are health-, safety-, and location-related requirements that facilities must meet to participate in the Medicare program as CAHs. CAH Conditions of Participation include being located (1) in rural areas and (2) at a certain distance from other hospitals or CAHs (hereinafter referred to collectively as the "location requirements"); having 25 or fewer beds used for inpatient care or "swing bed" services; and having an average length of patient stay that does not exceed 96 hours (hereinafter referred to as the "4-day requirement").[13, 14, 15]

Maintaining CAH Certification

CAHs are subject to periodic reassessments of their compliance with the CAH Conditions of Participation. CMS staff report that the current practice is to complete these reassessments every 3 years on average. For CAHs to maintain their certifications, CMS or a CMS-approved Medicare CAH accreditation program must verify that the CAHs continue to meet all CAH Conditions of Participation.[16]

CAH Services

CAHs are required to provide inpatient and outpatient services but have latitude in the specific services they provide. These services can include surgical, medical, and diagnostic services.[17] Surgical services include operating-room procedures, like appendectomies and joint replacements. Medical services include all treatment services other than operating-room procedures, like the treatment of concussions or kidney stones. Diagnostic services, like imaging and laboratory services, are used to diagnose diseases. CAHs can also provide other types of services used to facilitate medical, surgical, and diagnostic services, such as ambulance services.

Beyond inpatient and outpatient services, CAHs can also provide swing-bed services. Swing-bed services are equivalent to services that a

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[13] Social Security Act, § 1820(c)(2), 42 U.S.C. § 1395i-4(c)(2); CMS, *State Operations Manual*, Pub. No. 100-07, ch. 2, § 2256F. Accessed online on July 7, 2011; for URL details, see footnote 2.

[14] 42 CFR § 485.620(a). A "swing bed" is a CAH bed that is reimbursed for skilled nursing services.

[15] 42 CFR § 485.620(b).

[16] CMS, *State Operations Manual*, Pub. No. 100-07, ch. 2, §§ 2021A and 2022B. Accessed online on July 7, 2011; for URL details, see footnote 2.

[17] 42 CFR § 485.635; CMS, *State Operations Manual*, Pub. No. 100-07, Appendix W. Accessed at http://cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs.html (appendix-specific URL: http://cms.hhs.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_w_cah.pdf) on July 7, 2011.

beneficiary would receive in a skilled nursing facility, such as nursing care and rehabilitation therapies.[18,19]

Finally, CAHs can also provide inpatient services in "distinct-part" psychiatric and rehabilitation units.[20] Distinct-part psychiatric and rehabilitation units (hereinafter referred to collectively as "distinct-part units") are inpatient units that are certified separately by Medicare and are distinct from CAHs' other inpatient operations.[21]

CMS pays CAHs differently for services provided in distinct-part units than it does for services provided in other units at CAHs. Unlike CAH inpatient, outpatient, and swing-bed services, which Medicare reimburses at 101 percent of cost, Medicare reimburses services provided in distinct-part rehabilitation and psychiatric units at the rates set by the IPPS for rehabilitation facilities and psychiatric facilities, respectively.[22]

Proposed CAH Changes

Medicare payments to CAHs have come under increased scrutiny as part of ongoing deficit-reduction discussions. In September 2011, the Administration published its *Plan for Economic Growth and Deficit Reduction*.[23] The Plan proposed reducing CAH reimbursements to 100 percent of reasonable costs and eliminating the critical access certification for CAHs located fewer than 10 miles from another hospital.[24] The Administration's proposed budget for fiscal year 2014 made the same recommendations and estimated the savings over 10 years to be $1.4 billion from reducing reimbursement from 101 percent of reasonable costs to 100 percent, and $690 million from eliminating the critical access certifications of CAHs located fewer than 10 miles from another hospital.[25]

Related Work

In August 2013, OIG issued a report that focused on how many CAHs would meet the location requirements if required to re-enroll in Medicare.

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[18] 42 CFR § 485.645.

[19] 42 CFR § 409.20(a).

[20] 42 CFR § 485.647.

[21] CMS, *Medicare Claims Processing Manual*, Pub. No. 100-4, ch. 3, § 30.1. Accessed at http://cms.gov/Regulations-and-Guidance/Guidance/Manuals/Internet-Only-Manuals-IOMs.html (chapter-specific URL: http://cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/clm104c03.pdf) on July 30, 2013.

[22] 42 CFR § 413.74(e); 42 CFR pt. 412, subpts. N and P.

[23] Office of Management and Budget (OMB), *Living Within Our Means and Investing in the Future: The President's Plan for Economic Growth and Deficit Reduction*, September 2011. Accessed at http://www.whitehouse.gov/sites/default/files/omb/budget/fy2012/assets/jointcommitteereport.pdf on October 24, 2011.

[24] Ibid., p. 36.

[25] OMB, *Fiscal Year 2014 Budget of the U.S. Government*, p. 196, 2013.

OIG found that 64 percent of CAHs would not have been able to do so, and that Medicare and beneficiaries could realize substantial savings if CMS de-designated some of these CAHs and recertified them as acute-care hospitals.[26] OIG recommended that CMS seek legislative authority to assess whether existing CAHs should retain their critical access certifications. In addition, OIG recommended that CMS seek legislative authority to revise the CAH conditions of participation to include measures of whether CAHs serve beneficiaries who would otherwise be unable to reasonably access hospital services. These criteria could be used to further evaluate a hospital's CAH certification in cases where the hospital did not meet the current requirements related to its location. CMS concurred with the first recommendation but did not concur with the second.

Additionally, OIG is conducting a nationwide review of the coinsurance that Medicare beneficiaries paid for outpatient services received at CAHs.

Finally, OIG is conducting a nationwide review of swing-bed services at CAHs.[27] The review compares the reimbursement for swing-bed services at CAHs to the reimbursement for the same level of care obtained at skilled nursing facilities for 2005–2010.

METHODOLOGY

This study provides descriptive information about CAHs nationwide in 2011. We analyzed 2011 enrollment data, inpatient and outpatient claims data, and cost report data. Our purpose was to determine where CAHs were located, who received services at CAHs, what types of entities owned CAHs, how much Medicare paid CAHs, and what types of inpatient and outpatient services CAHs provided.

In some cases, we also compared CAHs to acute-care hospitals. When comparing CAHs to acute-care hospitals, we frequently categorized acute-care hospitals into three groupings based on their size: small (fewer than 100 beds), medium-sized (between 100–399 beds), and large (400 or more beds).[28] The term "acute-care hospitals" does not include psychiatric, rehabilitation, long-term care, and children's hospitals, because these hospitals have operations distinct from CAHs.

[26] OIG, *Most Critical Access Hospitals Would Not Meet the Location Requirements If Required To Re-Enroll in Medicare*, OEI-05-12-00080, August 2013.

[27] OIG, *U.S. Department of Health and Human Services Office of Inspector General Work Plan: Fiscal Year 2013*, Part I, p. 7. Accessed at https://oig.hhs.gov/reports-and-publications/archives/workplan/2013/Work-Plan-2013.pdf on September 23, 2013.

[28] We used the American Hospital Association's definitions of hospital size to establish the three groupings. American Hospital Association, *Glossary*, 2012. Accessed at http://www.ahadataviewer.com/glossary/ on June 13, 2013.

We did not assess CAHs' compliance with any Conditions of Participation. An earlier OIG report did assess whether CAHs would meet some of the Conditions of Participation—specifically, the location requirements—in 2011.[29]

Data Sources

Certification and Survey Provider Enhanced Reports (CASPER) database. The CASPER database includes data generated from certification surveys and includes information such as provider addresses and type of ownership. We used the CASPER database to identify the 1,329 CAHs and 3,547 acute-care hospitals included in this study. We also used the CASPER database to determine the addresses for all CAHs.

2011 National Claims History (NCH) inpatient and outpatient files. The 2011 NCH inpatient and outpatient files contain the final inpatient and outpatient claims data submitted by hospital providers for Medicare reimbursement. The 2011 NCH files include data only for Medicare beneficiaries. Although CAHs are not paid under a prospective payment system, the NCH inpatient file contains the applicable Medicare severity diagnosis related groups (MS-DRGs) based on information submitted on the claim. We used the MS-DRG present on the claim in our analysis, and hereinafter refer to the inpatient services provided to CAH inpatients as "MS-DRGs."

Fiscal Year (FY) 2010 and 2011 hospital cost reports. Hospitals are required to file annual cost reports with CMS. Hospital cost reports contain provider information such as facility characteristics and annual costs, and they include data for all hospital patients. We used 2010 hospital cost report data whenever 2011 hospital cost report data was not available on CMS's Healthcare Provider Cost Reporting Information System.[30]

[29] OIG, *Most Critical Access Hospitals Would Not Meet the Location Requirements If Required To Re-Enroll in Medicare*, OEI-05-12-00080, August 2013.

[30] CMS, *Cost Reports*, July 25, 2013. Accessed at http://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/CostReports/Cost-Reports-by-Fiscal-Year.html on July 30, 2013.

Data Analysis

Grouping acute-care hospitals by size. To classify acute-care hospitals by size, we used number of inpatient beds each hospital reported on its most recent cost report. Of the 3,547 acute-care hospitals included in this study, we classified 1,290 as small, 1,770 as medium-sized, and 380 as large. We did not classify the remaining 107 acute-care hospitals because a cost report was not available or the cost report did not have information about the number of inpatient beds.

Services provided by CAHs and acute-care hospitals. To describe the types of services provided by CAHs and acute-care hospitals, we used the inpatient and outpatient claims data and cost report data. Appendix A provides a detailed description of our analysis methods, cross-referenced to the corresponding table or chart in our results.

Medicare payments for CAH services. To determine the amounts that Medicare paid for services provided at CAHs, we used the inpatient and outpatient claims data. To determine the total Medicare payment for each service, we summed the amount paid by Medicare and the amount paid by the beneficiary in the form of deductible or coinsurance. We then summed total payments for each CAH, and determined the percentage of each CAH's total Medicare payments that came from inpatient services, outpatient services, and swing-bed services.

Limitations

Our analysis that used hospital cost report data does not account for the entire CAH and acute-care hospital population as some of these hospitals are not represented in the data. There were 51 CAHs and 208 acute-care hospitals that did not have 2011 cost report data. We were able to incorporate 33 of these CAHs and 130 of these acute-care hospitals into our analyses by using their 2010 cost report data. However, neither 2011 nor 2010 cost report data were available for 18 CAHs and 78 acute-care hospitals. To identify those instances where our analyses do not include all CAHs or hospitals, all tables and charts include listings of sample sizes and data sources.

Additionally, we analyzed cost report data as reported by hospitals to CMS. This data may include figures reported in error; we did not perform tests designed to determine the reliability of the data.

Standards

This study was conducted in accordance with the *Quality Standards for Inspection and Evaluation* issued by the Council of the Inspectors General on Integrity and Efficiency.

RESULTS

Medicare Beneficiaries Used CAHs Primarily for Outpatient Services

At CAHs, more than eight times as many Medicare beneficiaries visited outpatient departments as visited inpatient departments. Approximately 2.3 million beneficiaries visited CAHs in 2011. More than 99 percent of these beneficiaries visited outpatient departments. Conversely, approximately 12 percent of all beneficiaries who visited CAHs in 2011 visited the CAHs' inpatient departments.[31]

Similarly, most Medicare beneficiaries who received services at acute-care hospitals visited outpatient departments. However, compared to beneficiaries who received services at acute-care hospitals, a higher percentage of beneficiaries who received services at CAHs received outpatient services. Table 1 describes the frequency with which beneficiaries visited CAH and acute-care hospital inpatient and outpatient departments in 2011.

Table 1: Number of Medicare Beneficiaries Who Visited Inpatient and Outpatient Departments at CAHs and Acute-Care Hospitals

Type of hospital	Department visited	Number of Medicare beneficiaries	Percentage of Medicare beneficiaries*	Average number of Medicare beneficiaries per CAH or acute-care hospital
CAHs (n = 1,329)	All visits	2,329,674		1,753
	Inpatient department	282,584	12%	213
	Outpatient department	2,316,675	99%	1,743
Small hospitals (n = 1,290)	All visits	4,850,351		3,760
	Inpatient department	903,862	19%	701
	Outpatient department	4,562,533	94%	3,537
Medium-sized hospitals (n = 1,770)	All visits	16,602,499		9,380
	Inpatient department	5,197,601	31%	2,936
	Outpatient department	14,530,420	88%	8,209
Large hospitals (n = 380)	All visits	9,673,498		25,457
	Inpatient department	2,990,587	31%	7,870
	Outpatient department	8,334,349	86%	21,932

Source: OIG analysis of NCH outpatient claims files, 2013.
* See footnote 31.

[31] The overlap in percentage is attributable to the fact that some beneficiaries received both inpatient and outpatient services.

CAHs provided outpatient services that were also commonly provided by acute-care hospitals. The outpatient services that CAHs provided Medicare beneficiaries were similar to those provided by acute-care hospitals. Table 2 presents the types of services that CAHs provided most frequently to Medicare beneficiaries in 2011 and includes listings of where those types of services rank in frequency relative to other types of outpatient services provided at acute-care hospitals.[32]

Table 2: CAHs' Most Frequently Provided Types of Outpatient Services

Type of service	CAHs (n = 1,329)		Acute-care hospitals (n = 3,547)	
	Ranking	Number of times service was provided	Ranking	Number of times service was provided
Laboratory services	1	27,685,701	1	863,400,271,981
Minor procedures	2	5,708,563	2	122,803,730,011
Standard imaging	3	3,130,118	3	101,639,705,004
Other services	4	2,670,140	4	95,709,588,710
Office visits	5	1,738,412	5	53,836,968,851
Emergency room visits	6	1,571,794	6	44,011,438,663
Other tests	7	1,343,317	7	41,871,350,888
Specialist services	8	883,244	10	14,233,675,446
Advanced imaging	9	844,236	8	34,817,749,217
Ultrasound/echography	10	484,898	9	19,440,571,950

Source: OIG analysis of NCH outpatient claims files, 2013.

Patients Used Approximately One of Every Five Available CAH Inpatient Beds

Patients used 21 percent of CAHs' available bed days in 2011. Available bed days are the total number of inpatient beds in a hospital multiplied by the number of days in a year. Bed utilization rates represent the percentage of hospital bed days occupied over a set period.

Patients' utilization of CAHs' available bed days was far less than at acute-care hospitals. Small acute-care hospitals had the lowest average bed utilization rate of all acute-care hospitals. However, CAHs' average bed utilization rate of 21 percent was still lower than the 37 percent average bed utilization rate at small acute-care hospitals. Table 3 presents CAHs' and acute-care hospitals' average number of beds, their average

[32] Because CAHs' most frequently provided types of outpatient services closely aligned with those most frequently provided by acute-care hospitals, we did not divide acute-care hospitals into the three groupings based on hospital size.

total available bed days, their average total inpatient bed days used by all CAH patients, and CAHs' and acute-care hospitals' annual average bed utilization rates in 2011.[33] These figures include general inpatient stays and exclude swing-bed or distinct-part inpatient stays.

Table 3: Bed Utilization Rates at CAHs and Acute-Care Hospitals

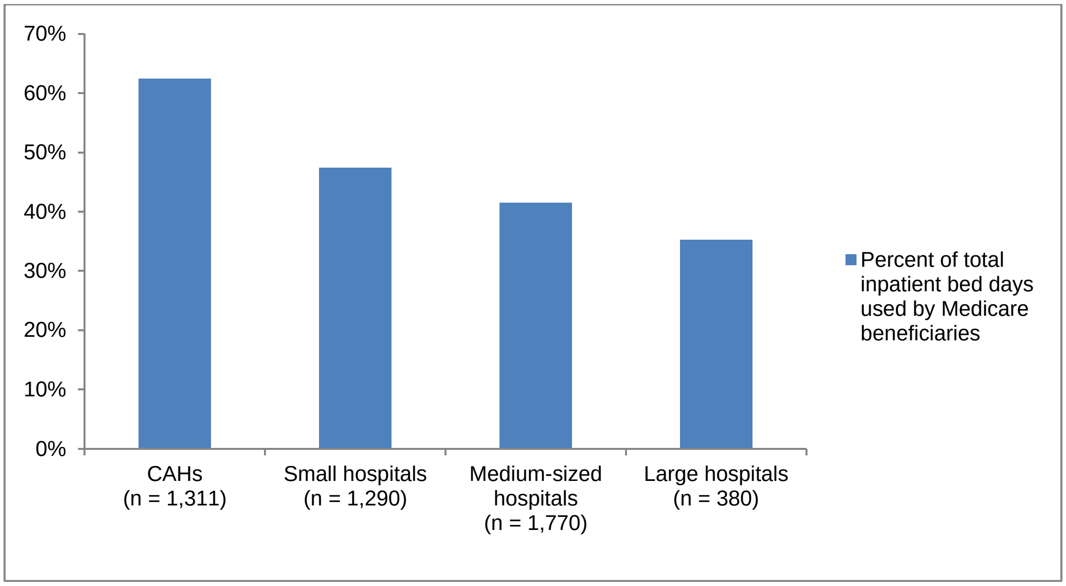
	Average number of beds	Annual average total available bed days	Annual average total inpatient days	Annual average bed utilization rate (percentage of available bed days occupied)
CAH (n = 1,311)	22	8,042	1,726	21%
Small hospitals (n = 1,290)	52	18,972	7,046	37%
Medium-sized hospitals (n = 1,770)	205	74,655	42,240	57%
Large hospitals (n = 380)	608	214,585	139,582	65%

Source: OIG analysis of hospital cost reports, 2013.

Inpatient beds at CAHs were primarily used by Medicare beneficiaries. Medicare beneficiaries used approximately 62 percent of all inpatient bed days at CAHs. In addition, CAHs provided a greater percentage of their total inpatient bed days to Medicare beneficiaries than did acute-care hospitals. Chart 1 illustrates the frequency with which Medicare beneficiaries utilized inpatient services at CAHs and acute-care hospitals. This chart shows the percentage of inpatient bed days occupied by Medicare beneficiaries at CAHs and acute-care hospitals.

[33] We used 2010 cost report data for 33 CAHs and 130 acute-care hospitals.

Chart 1: Medicare Beneficiaries' Utilization of Inpatient Services at CAHs and Acute-Care Hospitals



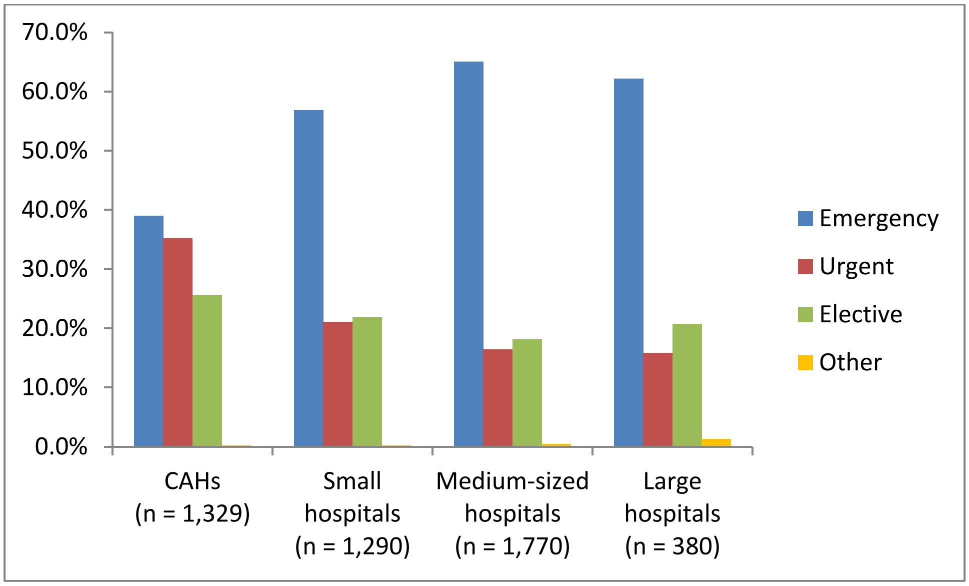
Source: OIG analysis of hospital cost reports, 2013.

Most of CAHs' Medicare inpatient admissions were emergency or urgent admissions. CAHs' inpatient admissions for Medicare beneficiaries primarily resulted from emergency room visits and from occasions in which beneficiaries needed urgent care and were admitted to the first available accommodation. Emergency room visits and instances where beneficiaries needed urgent care accounted for approximately 74 percent of CAHs' inpatient admissions. Elective admissions, meaning instances in which Medicare beneficiaries pre-authorized their admissions, accounted for 26 percent of CAHs' inpatient admissions. Other types of admissions accounted for less than 1 percent of CAHs' inpatient admissions.[34]

Emergency admissions at CAHs were a smaller percentage of all admissions than they were at acute-care hospitals. Conversely, urgent and elective admissions were a larger percentage of all admissions at CAHs than they were at acute-care hospitals. Chart 2 summarizes the sources of inpatient admissions for CAHs and acute-care hospitals.

[34] Research Data Assistance Center, *Claim Inpatient Admission Type Code*. Accessed at http://www.resdac.org/cms-data/variables/Claim-Inpatient-Admission-Type-Code on July 30, 2013.

Chart 2: Sources of Inpatient Admissions at CAHs and Acute-Care Hospitals



Source: OIG analysis of NCH inpatient claims files, 2013.

CAHs provided few surgical inpatient surgical services. The MS-DRGs for which CAHs most frequently billed were primarily medical rather than surgical. Except for joint replacements, these MS-DRGs were for the treatment of illnesses like pneumonia, kidney and urinary tract infections, and digestive disorders. Although joint replacements were CAHs' eighth most frequently billed MS-DRG, only 432 CAHs (approximately 33 percent of CAHs) provided this service to Medicare beneficiaries.

The MS-DRGs for which CAHs most frequently billed were different from those most frequently billed for by acute-care hospitals. Table 4 presents a ranking of the MS-DRGs for which CAHs billed most frequently for Medicare beneficiaries in 2011 and includes listings of how those MS-DRGs rank in frequency relative to other MS-DRGs billed for by acute-care hospitals.

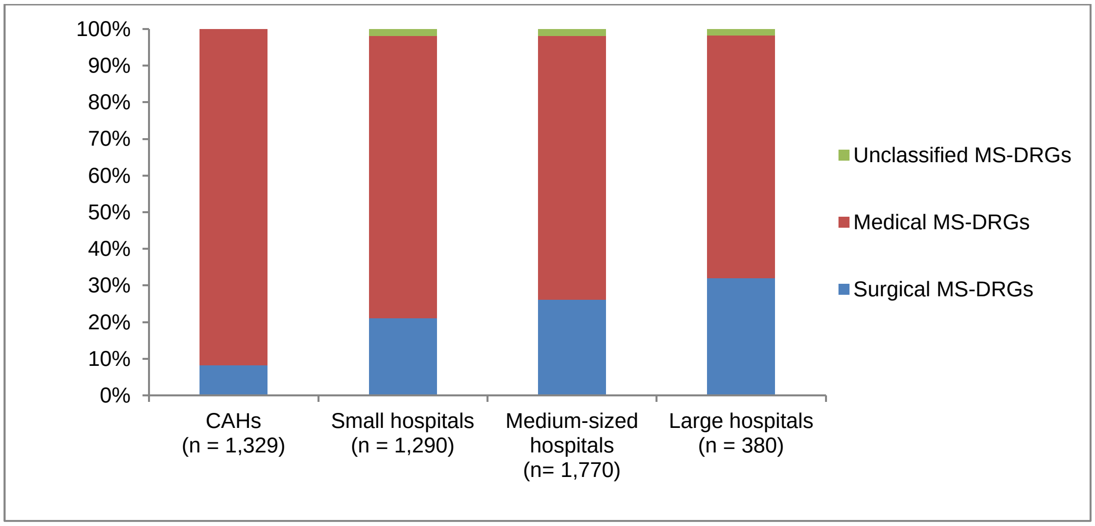
Table 4: MS-DRGs For Which CAHs Most Frequently Billed

Ranking	Description of MS-DRG*	CAHs (n = 1,329)		Small hospitals (n = 1,290)		Medium-sized hospitals (n = 1,770)		Large hospitals (n = 380)	
		Number that provided service	Number of times MS-DRG was billed	Ranking	Number of times MS-DRG was billed	Ranking	Number of times MS-DRG was billed	Ranking	Number of times MS-DRG was billed
1	Simple pneumonia & pleurisy w/CC [complications or comorbidities]	1,295	23,137	2	41,798	6	141,060	9	58,599
2	Simple pneumonia & pleurisy w/o CC/MCC [major complications or comorbidities]	1,297	18,486	14	20,761	32	58,572	46	21,639
3	Kidney & urinary tract infections w/o MCC	1,273	17,680	5	33,233	5	149,070	6	69,468
4	Esophagitis, gastroent & misc digest disorders w/o MCC	1,269	16,183	4	33,720	3	180,511	3	90,233
5	Chronic obstructive pulmonary disease w/o CC/MCC	1,247	15,279	8	26,031	20	86,997	30	30,958
6	Misc disorders of nutrition, metabolism, fluids/electrolytes w/o MCC	1,285	14,949	7	26,781	13	109,593	14	51,137
7	Heart failure & shock w/CC	1,233	10,729	6	31,075	4	160,787	4	83,688
8	Major joint replacement or reattachment of lower extremity w/o MCC	432	10,181	1	75,216	1	313,238	1	149,502
9	Heart failure & shock w/o CC/MCC	1,217	9,889	19	16,636	30	67,623	31	30,782
10	Cellulitis w/o MCC	1,234	9,398	11	22,358	15	107,254	16	49,234

Source: OIG analysis of NCH inpatient claims files, 2013.
*Wording for MS-DRG descriptions is verbatim from CMS's FY 2011 IPPS Final Rule Data Files.

CAHs provided fewer inpatient services that included operating-room procedures than did acute-care hospitals. Approximately 8 percent of the MS-DRGs for which CAHs billed Medicare were surgical MS-DRGs. Comparatively, approximately 21 percent of the MS-DRGs for which small acute-care hospitals—the hospital size most similar to that of CAHs—billed Medicare were surgical MS-DRGs. Chart 3 illustrates the percentages of surgical, medical, and unclassified MS-DRGs for which CAHs and acute-care hospitals billed Medicare.

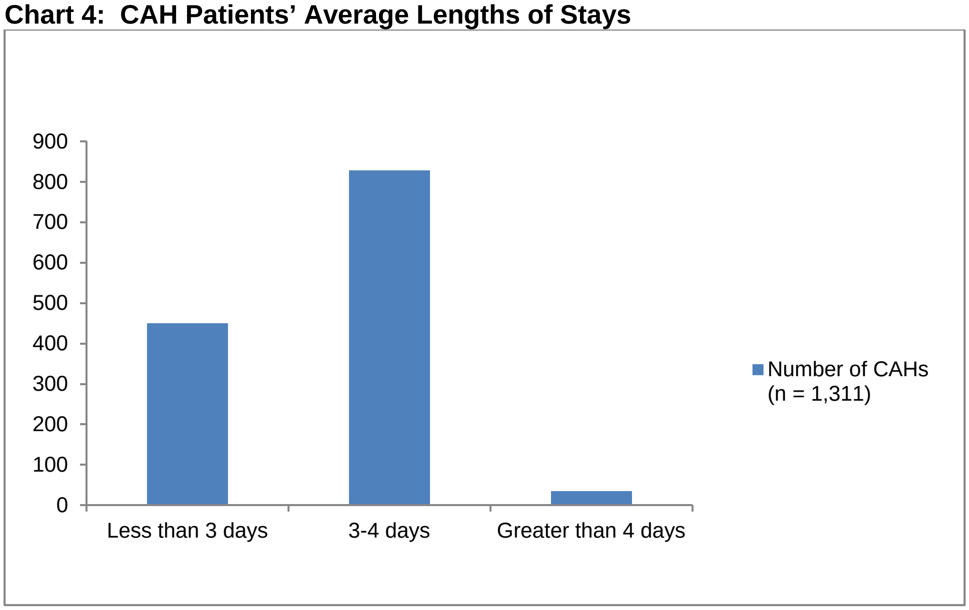
Chart 3: Percentages of Surgical and Medical MS-DRGs For Which CAHs and Acute-Care Hospitals Billed Medicare



Source: OIG analysis of NCH inpatient claims files, 2013.

Most CAHs had average inpatient stays of 3–4 days. Most CAHs' annual average lengths of stays fell within the statutory 4-day requirement, although the average length of stay at a few CAHs appears to have exceeded 4 days. Chart 4 shows CAHs' average lengths of stays for all patients in 2011.

Chart 4: CAH Patients' Average Lengths of Stays



Source: OIG analysis of hospital cost reports, 2013.

CAHs Reported Providing Outpatient and Inpatient Services from a Wide Array of Hospital Departments

CAHs provided inpatient and outpatient services from a variety of departments to Medicare beneficiaries in 2011. More than 75 percent of CAHs provided services in cardiology, respiratory, and operating-room departments; conversely, fewer than 25 percent of CAHs provided services in oncology, inpatient dialysis, or behavioral health departments. Table 5 lists the departments from which more than 60 percent of CAHs provided services, and Table 6 lists the departments from which fewer than 50 percent of CAHs provided services.[35]

[35] There were no departments in which services were provided by more than 50 percent, but less than 60 percent, of CAHs in 2011.

Table 5: Departments in Which More Than 60 Percent of CAHs Provided Services

Department	Number of CAHs (n = 1,329)	Percentage of CAHs
Pharmacy	1,326	>99%
Radiology – diagnostic	1,319	>99%
EKG/ECG (electrocardiogram)	1,319	>99%
Laboratory	1,319	>99%
Emergency room	1,319	>99%
Specialty services	1,312	99%
Physical therapy	1,297	98%
CT scan	1,282	97%
Other imaging services	1,268	95%
Other diagnostic services	1,252	94%
Cardiology	1,211	91%
Pulmonary function	1,169	88%
Respiratory services	1,162	87%
Operating-room services	1,136	86%
Other therapeutic services	1,096	83%
Magnetic resonance technology (MRT)	1,080	81%
Speech therapy - language pathology	1,023	77%
Occupational therapy	1,011	76%
IV therapy	978	74%
Anesthesia	962	72%
Preventive care services	932	70%
Laboratory - pathology	877	66%
Nuclear medicine	823	62%

Source: OIG analysis of NCH inpatient and outpatient claims files, 2013.

Table 6: Departments in Which Fewer Than 50 Percent of CAHs Provided Services

Department	Number of CAHs that provided service (n = 1,329)	Percentage of CAHs that provided service
EEG (electroencephalogram)	592	45%
Intensive care	505	38%
Gastrointestinal (GI) services	487	37%
Radiology - therapeutic and/or chemotherapy administration	451	34%
Ambulance	302	23%
Behavioral health treatment/services	230	17%
Ambulatory surgical care	202	15%
Labor room/delivery	202	15%
Coronary care	151	11%
Audiology	121	9%
Trauma response	120	9%
Oncology	58	4%
Inpatient renal dialysis	40	3%
Extra-corporeal shock wave therapy	36	3%
Osteopathic services	10	<1%
Nursery	2	<1%

Source: OIG analysis of NCH inpatient and outpatient claims files, 2013.

Most CAHs Provided Swing-Bed Services

In addition to inpatient and outpatient services, approximately 92 percent of CAHs (1,212 CAHs) provided swing-bed services to their patients in 2011. Swing-bed services include the same types of services that beneficiaries would receive in a skilled nursing facility, such as nursing care and rehabilitative therapies.

More CAHs provided swing-bed services than acute-care hospitals. In 2011, 29 percent of small acute-care hospitals (368 hospitals) and 2 percent of medium-sized acute-care hospitals (36 hospitals) provided this service. Hospitals with more than 100 beds (excluding beds for newborns and in intensive care units) are not permitted to offer swing-bed services.[36]

CAHs on average used proportionally more of their available bed days supplying swing-bed services than did acute-care hospitals. On average,

[36] 42 CFR § 482.66(a)(1).

CAHs used 10 percent of their total available bed days supplying swing-bed services, while small and medium-sized acute-care hospitals used approximately 4 percent of their total available bed days supplying those services. Table 7 lists the number of hospitals that provided swing-bed services, the average total swing-bed days used by all CAH patients, and average total swing-bed days as a percentage of average total available bed days for CAHs and acute care hospitals.[37]

Table 7: CAHs' Swing-Bed Utilization Rates

	Number of hospitals that provided swing-bed services	Average total available bed days*	Average total swing-bed days	Average total swing-bed days as a percentage of average total available bed days
CAHs (n = 1,311)	1,212	7,799	784	10%
Small hospitals (n = 1,290)	368	17,138	648	4%
Medium-sized hospitals (n = 1,770)	36	40,832	1,513	4%

Source: OIG analysis of hospital cost reports, 2013.
* This figure includes general acute-care and swing-bed inpatient days, and excludes distinct-part inpatient days.

Few CAHs Had Distinct-Part Units

Most CAHs did not have distinct-part units in 2011. Only 6 CAHs had distinct-part rehabilitation units and 60 CAHs had distinct-part psychiatric units in 2011. Table 8 describes the number of CAHs that had distinct-part units and the number of Medicare beneficiaries who received services in these units.

Table 8: Distinct-Part Units at CAHs

		Number of CAHs that had distinct-part units	Total number of Medicare beneficiaries	Average number of Medicare beneficiaries per CAH
CAHs (n = 1,329)	Rehabilitation distinct-part units	6	495	83
	Psychiatric distinct-part units	60	6,545	109

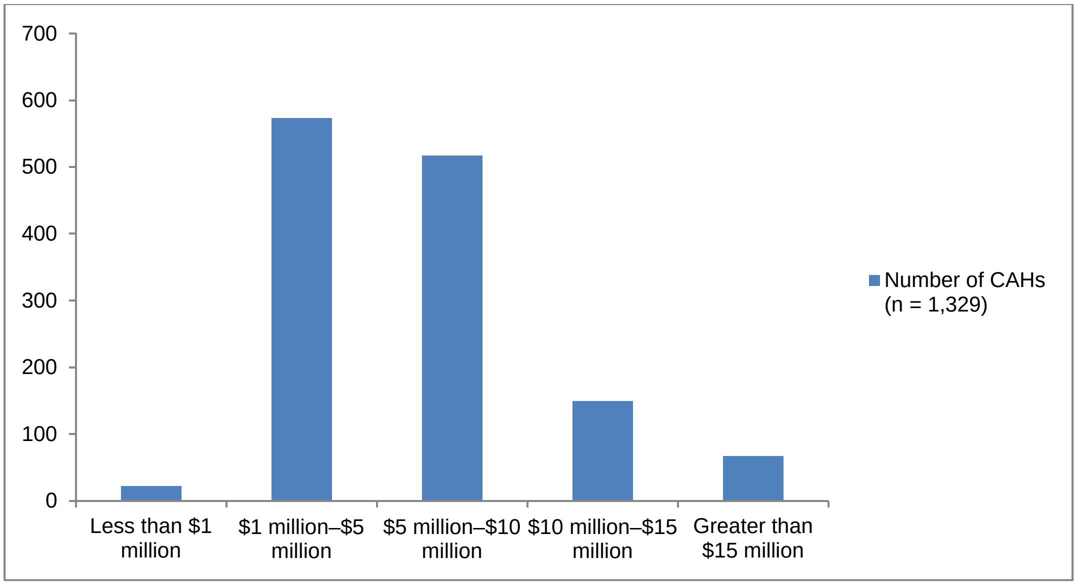
Source: OIG analysis of NCH inpatient claims file, 2013.

[37] Hospitals' total swing-bed days represents the number of days annually that are occupied by patients receiving swing-bed services.

Most CAHs Received Between $1 Million and $10 Million in Medicare Payments for Services Provided

Medicare payments for all types of services provided at CAHs in 2011 ranged from less than $1 million to more than $26 million. Most CAHs received between $1 million and $10 million in total Medicare payments. Chart 5 illustrates the distribution of Medicare payments to CAHs in 2011.

Chart 5: Distribution of Medicare Payments to CAHs



Source: OIG analysis of NCH inpatient and outpatient claims files, 2013.

In 2011, the average CAH received approximately $6.4 million in Medicare payments. Of Medicare payments to the average CAH, approximately 30 percent were for inpatient services, 51 percent were for outpatient services, 19 percent were for swing-bed services, and 1 percent was for distinct-part psychiatric and rehabilitation services. See Table 9 for a description of Medicare payments to CAHs in 2011.

Table 9: Mean, Median, and Range of Medicare Payments to CAHs

		Mean	Median	Minimum	Maximum
CAHs (n = 1,329)	Total Medicare payments	$6,360,349	$5,498,080	$147,916	$26,788,129
	Medicare payments for inpatient services	$2,091,719	$1,542,403	$0	$12,588,660
	Medicare payments for outpatient services	$3,302,590	$2,684,886	$92,723	$14,765,124
	Medicare payments for swing-bed services	$966,040	$781,938	$0	$8,093,736
	Percentage of total Medicare payments for inpatient services	30.3%	29.7%	0%	71.4%
	Percentage of total Medicare payments for outpatient services	50.6%	50.9%	11.3%	100%
	Percentage of total Medicare payments for swing-bed services	19.1%	17.1%	0%	83.7%

Source: OIG analysis of NCH inpatient and outpatient claims files, 2013.

Some CAHs receive large percentages of their Medicare payments for just one type of service. For example, 53 CAHs received more than 50 percent of their Medicare payments for swing-bed services, including 5 CAHs that received more than 75 percent of their Medicare payments for such services. Similarly, 17 CAHs received more than 80 percent of their Medicare payments for outpatient services, including 7 CAHs that received more than 95 percent of their Medicare payments for such services.

Some CAHs received a low percentage of their total Medicare payments for inpatient services. In 2011, 54 CAHs received less than 10 percent of their Medicare payments for inpatient services, including 8 CAHs that received less than 3 percent of their Medicare payments for such services and 4 CAHs that did not receive any Medicare payments for inpatient services.

CONCLUSION

This report provides information about the services CAHs provided in 2011 and to what extent Medicare beneficiaries and other patients used these services. Policymakers and regulators can use the information provided in this work as they consider recommended changes to CAH certification requirements and payments.

In August 2013, OIG made several recommendations about how facilities are certified and recertified as CAHs. OIG recommended that CMS seek legislative authority to assess whether existing CAHs should retain their certifications. OIG has further recommended that CMS seek legislative authority to revise the CAH conditions of participation to include measures of whether CAHs serve beneficiaries who would otherwise be unable to reasonably access hospital services. CMS could use these measures to further evaluate a hospital's CAH certification in cases where the hospital did not meet the current requirements related to its location.

Additionally, the Administration's 2014 budget contains proposals about changes in the CAH certification requirements and how much Medicare should reimburse CAHs for their services. The budget proposes that CAHs within 10 miles of another hospital lose their certification. The budget also proposes decreasing Medicare reimbursement from 101 to 100 percent of costs.

As policymakers consider OIG's recommendations and the Administration's proposals, they should consider OIGs' previous work on CAHs, the current report, and future work on the topic. Previous OIG work examined the location of CAHs relative to other hospitals. Upcoming work will examine beneficiaries' coinsurance burden when receiving CAH outpatient services and Medicare reimbursement for swing-bed services.

Finally, additional insights into the role CAHs play in the healthcare system might be gained by conducting more detailed analyses of individual CAHs and the capacity of the healthcare systems that are in close proximity to CAHs.

APPENDIX A

Detailed Methodology

Table A-1: Analyses, Sources, and Methods by Table or Chart

Analysis	**Table/ Chart**	**Source**	**Method**
Number of Medicare beneficiaries who visited CAH and acute-care hospital inpatient and outpatient departments	Table 1	Inpatient and outpatient files	We counted the number of distinct Medicare beneficiaries who received inpatient and outpatient services.
CAHs' most frequently provided types of outpatient services	Table 2	Outpatient file	We matched each Heathcare Common Procedure Coding System (HCPCS) code—which described the service provided—to its Berenson-Eggers Type of Service (BETOS) code, which groups HCPCS codes into readily understood clinical categories.[38] We then calculated the frequency with which each BETOS code was represented in CAH outpatient claims. We also calculated the frequency with which CAHs' top 10 BETOS codes were represented in acute-care hospitals' outpatient claims.
CAHs' and acute-care hospitals' bed utilization rates for all patients	Table 3	Cost reports	From the cost reports, we retrieved the number of inpatient beds and the number of inpatient bed days (days that a bed was used to treat an inpatient) at each CAH and acute-care hospital. We found the average number of beds for each group of hospitals, and multiplied that number by 365 to calculate the annual average number of available bed days. We then divided the number of inpatient bed days by this number to get the inpatient utilization rate for each group.
Medicare beneficiaries' utilization of inpatient services at CAHs and acute-care hospitals	Chart 1	Cost reports	From the cost reports, we retrieved the number of inpatient bed days that were used by Medicare beneficiaries and the total number of inpatient bed days at each CAH and acute-care hospital. We then divided the number of inpatient days that were used by Medicare beneficiaries by the total number of inpatient bed days to calculate the percentage of inpatient bed days used by Medicare beneficiaries for each group of hospitals.
Sources of CAHs' and acute-care hospitals' inpatient admissions	Chart 2	Inpatient file	We counted the number of CAH and acute-care hospital admissions that came from each admission source.[39]
CAHs' most frequently billed MS-DRGs	Table 4	Inpatient file	We counted the number of times each MS-DRG was represented in CAH inpatient claims. We also calculated the frequency with which each CAHs' top 10 MS-DRGs were represented in acute-care hospital inpatient claims.
Percentages of surgical and medical MS-DRGs for which CAHs and acute-care hospitals billed Medicare	Chart 3	Inpatient file	We counted the number of surgical and medical MS-DRGs at CAHs and acute-care hospitals by matching the MS-DRGs billed to CMS's list of FY 2011 MS-DRGs, which classified MS-DRGs as either surgical or medical.[40]

continued on next page

[38] CMS, *Berenson-Eggers Type of Service (BETOS) Codes.* Accessed at http://www.cms.gov/Medicare/Coding/HCPCSReleaseCodeSets/BETOS.html on August 5, 2013.

[39] Research Data Assistance Center, *Claim Inpatient Admission Type Code.* Accessed at http://www.resdac.org/cms-data/variables/Claim-Inpatient-Admission-Type-Code on July 30, 2013.

[40] 75 Fed. Reg. 50042, 50548 (Aug. 16, 2010).

Table A-1: Analyses, Sources, and Methods by Table or Chart, Continued

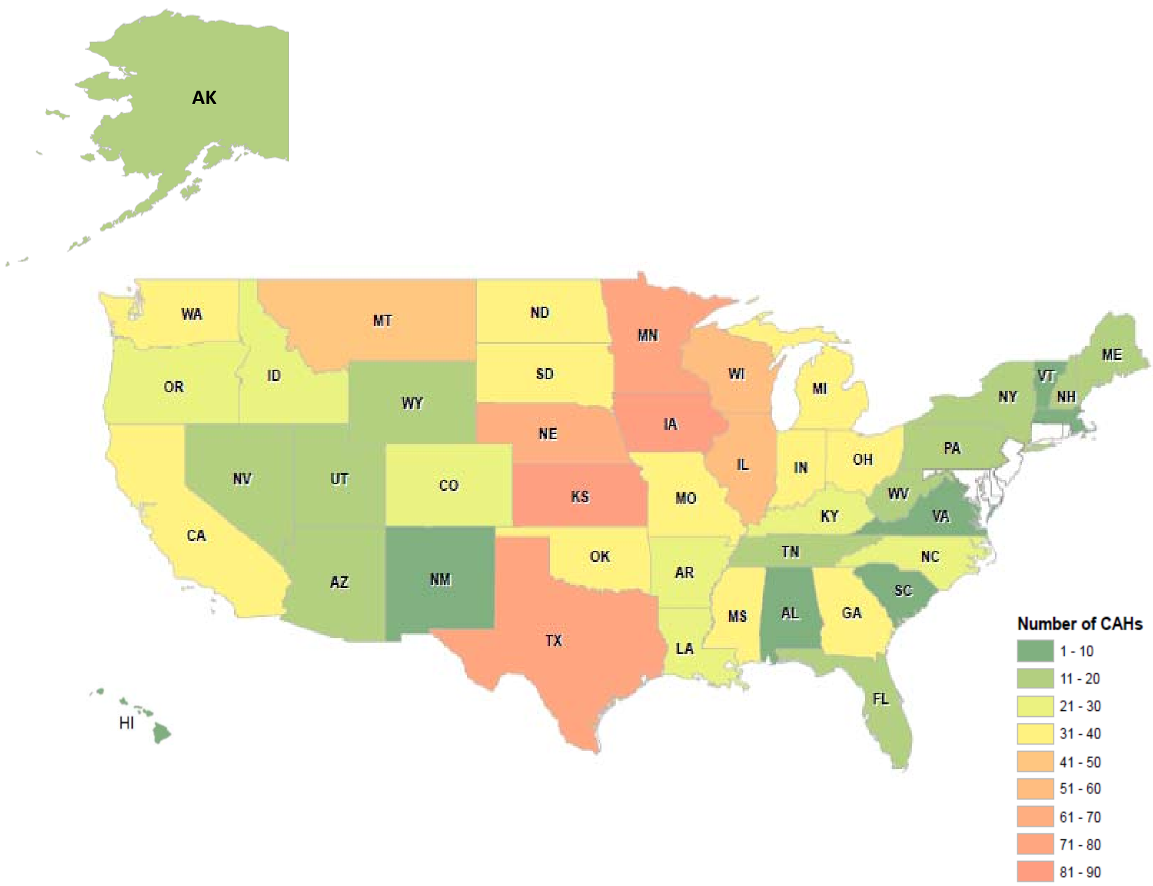
Analysis	Table/ Chart	Source	Method
CAH patients' average lengths of stay	Chart 4	Cost reports	From the cost reports, we retrieved the average length of stay for each CAH's inpatients. We then grouped the CAHs based on their average lengths of stay and counted the number of CAHs in each group.
Departments from which more than 60 percent of CAHs provided services	Table 5	Inpatient and outpatient files	We counted the number of CAHs that provided specific revenue center codes on their inpatient or outpatient claims. Revenue center codes describe specialized units or departments in hospitals.[41]
Departments from which fewer than 50 percent of CAHs provided services	Table 6	Inpatient and outpatient files	We counted the number of CAHs that provided specific revenue center codes on their inpatient or outpatient claims. Revenue center codes describe specialized units or departments in hospitals.
CAHs' swing-bed utilization rates for all patients	Table 7	Cost reports	We used the cost report data to determine the number of CAHs and acute-care hospitals that provided swing-bed services. We also retrieved the number of inpatient beds, as well as the number of swing-bed days (the number of days each bed was used to provide skilled nursing services to a patient), for each group of hospitals. We multiplied the number of inpatient beds available by 365 to calculate the number of total available bed days for each group. We then divided the total swing-bed days by the total available bed days to calculate the total swing-bed days as a percentage of total available bed days for each group of hospitals.
Distinct-part units at CAHs	Table 8	Inpatient file	We counted the number of CAHs that submitted claims from a distinct-part unit and the number of distinct Medicare beneficiaries who received services in those units. We then divided the total number of Medicare beneficiaries by the number of CAHs to calculate the average number of Medicare beneficiaries per CAH.

Source: OIG analysis method, 2013.

[41] Research Data Assistance Center, *Revenue Center Code*. Accessed at http://www.resdac.org/sites/resdac.org/files/Revenue%20Center%20Table.txt on August 5, 2013.

APPENDIX B

Distribution of CAHs across All States



Source: OIG analysis of NCH inpatient and outpatient claims files, 2013.

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