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October 31, 2017
The Honorable Lamar Alexander
Chairman
The Honorable Patty Murray
Ranking Member
Committee on Health, Education, Labor, and Pensions
United States Senate
The Honorable Greg Walden
Chairman
The Honorable Frank Pallone, Jr.
Ranking Member
Committee on Energy and Commerce
House of Representatives

Physician Workforce: Expansion of the Children's Hospitals Graduate Medical Education Payment Program

Physicians are required to undergo graduate medical education (GME) training in order to practice independently, and the majority of federal payments to support such training are provided to hospitals by the Medicare program.[1] These payments are based, in part, on the number of Medicare patients treated by a hospital. Because Medicare primarily covers individuals age 65 and older, children's hospitals generally treat very few Medicare patients and consequently receive few GME payments from Medicare.[2] Instead, many children's hospitals receive payments to support GME training through the Children's Hospitals Graduate Medical Education (CHGME) Payment Program, which is administered by the Health Resources and Services Administration (HRSA) within the Department of Health and Human Services (HHS). According to HRSA, hospitals that participate in the CHGME program train nearly half (48 percent) of all pediatric residents (physicians in GME training) and over half (53 percent) of pediatric subspecialty residents annually.[3]

Prior to 2014, eligibility for the CHGME program was generally restricted to children's hospitals that were freestanding as of December 31, 1996, and for which HHS had established a payment cap based on the number of physicians in GME training eligible for funding under Medicare GME rules.[4] Similar to the Medicare GME program, CHGME program payments are also

[1]Medicare is the federally financed health insurance program for individuals age 65 and older and individuals under age 65 with certain disabilities or end-stage renal disease.

[2]For purposes of this report, a children's hospital is defined as a hospital in which more than 50 percent of its inpatients are under age 18.

[3]Specialty programs are educational experiences following completion of medical school (e.g., pediatrics), which can lead to board certification. These are also known as core programs. Subspecialty programs are educational experiences following the completion of prerequisite specialty programs (e.g., pediatric pulmonology). These are also known as fellowships.

[4]Prior to 2014, in order to participate in the CHGME program, a hospital must have been excluded from the Medicare inpatient prospective payment system (IPPS)—the system Medicare uses to pay most hospitals for inpatient

capped for most hospitals based on their number of full-time-equivalent (FTE) residents in GME training as of 1996, the base year.[5] With the enactment of the Children's Hospital GME Support Reauthorization Act of 2013 CHGME program eligibility expanded.[6] Since 2014, two additional types of freestanding hospitals—referred to as newly qualified hospitals—may be eligible for the CHGME program. Newly qualified hospitals that may be eligible include the following:

- Other freestanding hospitals excluded from the Medicare inpatient prospective payment system (IPPS), such as psychiatric hospitals, that predominantly treat individuals under age 18.
- Certain children's hospitals that had not been freestanding in December 1996 and therefore did not have a 1996 base year FTE cap.[7] Under this provision, HHS is able to establish a CHGME FTE cap for these hospitals.

Annual funding for newly qualified hospitals is capped at a total of $7 million and is only made available if the overall CHGME program receives annual funding above $245 million, which it has in each year since program eligibility was expanded in 2014.

The Protecting Access to Medicare Act of 2014 includes a provision for us to examine payments to and characteristics of hospitals that participated in the CHGME program under the expanded eligibility criteria.[8] In this report, we describe (1) the number and type of newly qualified hospitals that applied for and received payments through the CHGME program from fiscal year 2015 through 2017, and the amount of payments these hospitals received; and (2) how the newly qualified hospitals used the payments, including any potential effect of the payments on the number and characteristics of pediatric providers trained to address the health care needs of children.

To address these objectives, we analyzed data in HRSA's online Data Warehouse and data that hospitals are required to submit annually to HRSA related to their participation in the CHGME program.[9] We also interviewed officials from HRSA, the Children's Hospital Association, and all of the newly qualified hospitals. To assess the reliability of the data we used in our analysis, we reviewed related documentation, interviewed officials from HRSA and the newly qualified hospitals, and performed appropriate electronic data checks. Based on this analysis, we determined that the data were sufficiently reliable for the purposes of our objectives.
We conducted this performance audit from January 2017 through October 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

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services—on the basis of being a freestanding children's hospital. A children's teaching hospital is considered freestanding if it does not share a Medicare hospital provider number with a larger health care system.

[5]Resident FTE counts reflect the number of residents training at the hospital complex and certain non-hospital/non-provider settings/sites throughout the hospital's fiscal year. Each resident may not spend enough time at the site to fill a full-time residency slot for the year; therefore the number of residents at a hospital is often greater than the number of FTEs.

[6]Pub. L. No. 113-98, 129 Stat. 1140 (2014).

[7]Prior to the reauthorization, children's hospitals that became freestanding after December 31, 1996, could become eligible for the CHGME program by receiving an FTE cap through an affiliation agreement with another hospital or beginning a new residency training program.

[8]Pub. L. No. 113-93, § 214, 128 Stat. 1040, 1048 (2014).

[9]CHGME funding recipients are required to report annually on characteristics such as the number of residents trained, the specialties residents trained in, and whether residents trained in medically underserved areas, among other things.

our findings based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings based on our audit objectives.

Results in Brief

We found that four newly qualified hospitals joined the CHGME program under the expansion in 2014. One of the four hospitals qualified for the program as a psychiatric children's hospital; the other three hospitals qualified under the provision establishing a CHGME FTE cap for freestanding children's hospitals that did not have one. Total CHGME program payments varied across the hospitals each year and in fiscal year 2016 (the most recent full year of data available) ranged from approximately $320,000 to approximately $1.6 million. The newly qualified hospitals used the CHGME program payments to provide training in specialties with physician shortages, such as pediatric psychiatry, and in underserved settings, including primary care settings and geographic areas that have a shortage of primary care health services. HHS reviewed a draft of this report and provided technical comments, which we incorporated.

Background

The CHGME program was established by the Healthcare Research and Quality Act of 1999.[10] Unlike Medicare GME, which is a mandatory spending program, the CHGME program relies on discretionary spending.[11] In fiscal year 2017, the program received $300 million (a $5 million increase from fiscal year 2016), and 58 hospitals received payments. Hospitals must apply to the program each year, and the amount of CHGME payments available to each varies from year to year depending on the total amount of funding made available for the program from annual appropriations and the number of hospitals that participate.

CHGME program payments are based, in part, on the average number of resident FTEs recorded on a hospital's three most recently filed Medicare cost reports.[12] Similar to the Medicare program, the CHGME program applies a cap on the number of resident FTEs that a hospital may count when requesting payment for GME training. Generally, a hospital's cap is the number of resident FTEs enrolled in the hospital's residency programs during the most recent cost reporting period that ended on or before December 31, 1996, referred to as the base year FTE cap.

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[10]Pub. L. No. 106-129, § 4, 113 Stat. 1653, 1671-74 (1999) (codified, as amended, at 42 U.S.C. § 256e). The CHGME program is currently authorized through fiscal year 2018.

[11]Mandatory spending is composed of budget outlays controlled by laws other than appropriations acts, including federal spending on entitlement programs. By contrast, discretionary spending is provided and controlled through appropriations acts.

[12]Providers, such as hospitals, that render Medicare Part A services are required to submit cost reports annually. Among other things, these reports contain self-reported information on facility characteristics, utilization data, and financial statement data.

Residents are generally divided into two categories: those training in a specialty in their initial residency period (i.e., the minimum number of years required for board eligibility) and those beyond that period (i.e., in additional subspecialty training). For purposes of calculating certain payments, the CHGME program, like Medicare, assigns a 0.5 weighting factor to residents who are beyond their initial residency period. Residents are not weighted for purposes of determining a hospital's FTE cap.

HRSA withholds a portion of each hospital's CHGME payments each year until it can verify the number of FTEs reported by the hospital through a process referred to as reconciliation.

A hospital can receive CHGME program payments if it is a sponsoring institution, a major participating site, or another rotational site that provides educational experiences or assignments for a GME program. A sponsoring institution is the organization that assumes the ultimate financial and academic responsibility for a GME program. A major participating site is an approved site to which all residents in at least one program rotate for a required educational experience, and which must have a master affiliation agreement with a sponsoring institution.

Prior to 2014, in order to participate in the CHGME program, a hospital must have been excluded from the Medicare IPPS on the basis of being a freestanding children's hospital. In 2014, program eligibility expanded to include additional types of freestanding hospitals excluded from the Medicare IPPS, including psychiatric hospitals, cancer hospitals, long-term care hospitals, and rehabilitation hospitals that predominantly treat individuals under age 18. CHGME program eligibility also expanded to certain children's hospitals that split from other teaching hospitals after December 1996 and therefore did not have their own 1996 base year FTE cap. HHS is now authorized to establish a CHGME FTE cap for these hospitals. The CHGME FTE cap for these hospitals is based on the number of FTEs trained during the most recent Medicare cost report period completed on or before April 7, 2014, the date of enactment of the 2013 reauthorization. Prior to 2014, the only way for these hospitals to qualify for the CHGME program was to establish a new residency program or establish an affiliation agreement with another hospital to share its cap.

Four Newly Qualified Hospitals Joined the CHGME Program after the Expansion

Since the enactment of the Children's Hospital GME Support Reauthorization Act of 2013, four hospitals applied for and became newly qualified to participate in the CHGME program. (See table 1.) None of the newly qualified hospitals are sponsoring institutions for GME training programs. All four hospitals act as major participating sites for other sponsoring institutions.

Table 1: Newly Qualified Hospitals under the Children's Hospitals Graduate Medical Education (CHGME) Payment Program

Hospital	Type	Location	Fiscal year entered program
Emma Pendleton Bradley Hospital	Psychiatric children's hospital	Riverside, R.I.	2015
El Paso Children's Hospital	Children's hospital[a]	El Paso, Tex.	2015
Dell Children's Medical Center	Children's hospital[a]	Austin, Tex.	2015
The Children's Hospital of San Antonio	Children's hospital[a]	San Antonio, Tex.	2016

Source: GAO review of Health Resources and Services Administration data. | GAO-18-66R
[a]These hospitals qualified for the program under the CHGME full-time-equivalent cap provision.

One of the four newly qualified hospitals became eligible for the program as a psychiatric children's hospital; the other three hospitals qualified under the CHGME FTE cap provision. Representatives from the Children's Hospital Association told us that there are other psychiatric children's hospitals that are eligible for the program, but these hospitals have small training programs and might choose not to participate due to the administrative responsibilities associated with participation. HRSA officials told us that they are aware of other newly qualified hospitals that may apply for the CHGME program in the future; however, no additional newly qualified hospitals applied for fiscal year 2018.

Total CHGME program payments varied across the four newly qualified hospitals each year and were significantly lower than the average total payment to all other CHGME program hospitals. For example, in fiscal year 2016, total payments to the newly qualified hospitals varied from

$323,247 to $1,587,990, reflecting, in part, differences in the number of FTEs trained by each hospital (see table 2). That same year, the average total payment to the newly qualified hospitals was $971,205, while the average total payment to the originally eligible hospitals was $5,124,940.

Table 2: Children's Hospitals Graduate Medical Education (CHGME) Payment Program Funding for Newly Qualified Hospitals, Fiscal Years 2015-2017

Hospital	2015		2016		2017	
	Total payments (dollars)	Full-time equivalents	Total payments (dollars)	Full-time equivalents	Total payments (dollars)[a]	Full-time equivalents
Emma Pendleton Bradley Hospital	293,043	8.62	323,247	8.45	280,625	8.45
El Paso Children's Hospital	1,051,394	23.56[b]	1,114,104	23.56[b]	1,463,986	23.56[b]
Dell Children's Medical Center	1,310,369	27.85	1,587,990	29.40	2,033,288	33.22
The Children's Hospital of San Antonio	[c]	[c]	859,477	24.00	403,173	9.67
Total	**2,654,806**	**60.03**	**3,884,818**	**85.41**	**4,181,072**	**74.90**
Average	884,935	20.01	971,205	21.35	1,045,268	18.73

Source: GAO analysis of Health Resources and Services Administration data. | GAO-18-66R
Note: The CHGME program provides payments for direct medical education expenses and indirect medical education expenses. Direct medical education payment amounts are calculated using the 3-year rolling average of weighted full-time-equivalent (FTE) counts. Indirect medical education payment amounts are calculated using the 3-year rolling average of unweighted FTE counts. This table presents unweighted 3-year rolling average FTE counts.
[a]Fiscal year 2017 total payment amounts were not yet final when we completed our report. According to Health Resources and Services Administration officials, hospitals will receive one additional small payment before the end of the fiscal year.
[b]El Paso Children's Hospital trained residents in excess of its FTE cap of 23.56 for each fiscal year, which results in the same FTE rolling averages for all 3 years.
[c]The Children's Hospital of San Antonio did not join the CHGME program until fiscal year 2016.

Newly Qualified Hospitals Used CHGME Payment Program Funds to Provide Training in Specialties with Physician Shortages or in Medically Underserved Settings

Officials from all four newly qualified hospitals stated that CHGME program payments are the main source of financial support for their GME training programs, which they use to provide resident training in medical specialties that have physician shortages or in medically underserved settings. For example, in addition to providing training in pediatrics—which was provided by all four newly qualified hospitals—one hospital provided training in psychiatry and child and adolescent psychiatry. According to representatives from the Children's Hospital Association and 2015 data from the American Academy of Child & Adolescent Psychiatry, there are shortages of pediatric mental health specialists in the United States.[13] Officials from the three other newly qualified hospitals stated that they plan to increase the number of resident training programs in the future by adding training in other pediatric subspecialties, such as pediatric gastroenterology, neonatology, critical care, rehabilitation, neurology, infectious disease, and endocrinology.

[13]See, for example, American Academy of Child & Adolescent Psychiatry, *Workforce Maps by State,* accessed August 14, 2017, https://www.aacap.org/aacap/Advocacy/Federal_and_State_Initiatives/Workforce_Maps/Home.aspx. With the exception of the District of Columbia, in 2015, all states experienced high or severe shortages in the number of practicing child and adolescent psychiatrists.

The number of residents supported by the CHGME program increased at all three newly qualified hospitals that participated in the program in both academic year 2014-2015 and academic year 2015-2016.[14] (See table 3.) During academic year 2014-2015, the average number of CHGME program-supported residents in newly qualified hospitals was 38; overall, the average number of CHGME program-supported residents in all hospitals that participated in the program was 205. The majority of the residents at newly qualified hospitals trained in specialty programs, although two of these hospitals trained a small number of residents in subspecialty programs as well. For example, in academic year 2015-2016, 13 of the 328 residents were in subspecialty programs.

Table 3: Residents Supported by the Children's Hospitals Graduate Medical Education (CHGME) Payment Program at Newly Qualified Hospitals, Academic Years 2014-2015 and 2015-2016

Hospital	2014-2015 (residents)	2015-2016 (residents)
Emma Pendleton Bradley Hospital	40[a]	42
El Paso Children's Hospital	44	45[a]
Dell Children's Medical Center	30	50
The Children's Hospital of San Antonio	[b]	191
Total	**114**	**328**
Average	38	82

Source: GAO analysis of Health Resources and Services Administration (HRSA) data. | GAO-18-66R
[a]The HRSA data were updated to reflect data GAO received directly from the hospital.
[b]The Children's Hospital of San Antonio did not join the CHGME program until fiscal year 2016.

Although hospitals may receive CHGME program funds for a number of program-related expenses, officials from three of the four newly qualified hospitals stated that the majority of CHGME program payments are used to directly support residents. CHGME funding is determined based, in part, on the number of FTEs reported by the hospital. (See table 2 for the number of FTEs reported by each of the newly qualified hospitals during fiscal years 2015 through 2017.) However, the number of residents rotating through the hospital often does not correspond directly to the number of FTEs because each resident may spend only a portion of an FTE at the hospital. For example, in academic year 2015-2016, the median award ranged from $2,812 to $30,719 (See table 4.). According to HRSA and hospital officials, the variation in resident award amounts is in part a result of how much time a resident spent rotating through the hospital. HRSA officials added that residents that spent closer to one FTE at a hospital received a larger award.

Table 4: Median Award to Children's Hospitals Graduate Medical Education (CHGME) Payment Program Residents Rotating at Newly Qualified Hospitals, Academic Years 2014-2015 and 2015-2016

Hospital	2014-2015 (dollars)	2015-2016 (dollars)
Emma Pendleton Bradley Hospital	[a]	6,495
El Paso Children's Hospital	22,313	24,220
Dell Children's Medical Center	43,107	30,719
The Children's Hospital of San Antonio	[b]	2,812

Source: GAO review of Health Resources and Services Administration (HRSA) data. | GAO-18-66R
Note: HRSA officials indicated differences in counts of residents explained most of the variation in these averages. They said that variation in the award amount per resident is related to the number of residents that compose a full-time-equivalent; hospitals that have residents with shorter rotations will have a smaller award per resident.

[14]Academic years generally start and end with the beginning and end of the school year. For example, academic year 2014-2015 began July 1, 2014, and ended June 30, 2015.

During fiscal years 2015 and 2016, the three newly eligible hospitals that participated in the program had a relatively constant number of FTEs. The Children's Hospital of San Antonio entered the program during fiscal year 2016 and saw a drop in FTEs from fiscal year 2016 to 2017. According to HRSA officials, the hospital is restructuring the program, which may explain the reduction in FTEs.

[a]Hospital officials stated that the median award amount reported to HRSA was calculated incorrectly for academic year 2014-2015. Therefore, we did not report it.
[b]The Children's Hospital of San Antonio did not join the CHGME program until fiscal year 2016.

Three of the four newly qualified hospitals used CHGME program funds to support training in underserved settings or geographic areas. HRSA tracks whether hospitals provide training in three types of underserved settings or areas: (1) primary care setting, (2) Medically Underserved Area, and (3) rural area.[15] Two of the four newly qualified hospitals had training sites in primary care settings, three of the four hospitals had training sites in Medically Underserved Areas, and none of the newly qualified hospitals had training sites in rural areas. (See table 5.) For comparison, in academic year 2014-2015, approximately 50 percent of all CHGME program-funded training sites were located in a primary care setting, 44 percent were located in a Medically Underserved Area, and less than 1 percent were located in a rural area.

Table 5: Characteristics of Training Sites for Newly Qualified Hospitals in the Children's Hospitals Graduate Medical Education (CHGME) Payment Program, Academic Years 2014-2015 and 2015-2016

Hospital	Training site characteristics		
	Primary care setting	Medically Underserved Area	Rural area
Emma Pendleton Bradley Hospital	No	No	No
El Paso Children's Hospital	Yes	Yes	No
Dell Children's Medical Center	Yes	Yes	No
The Children's Hospital of San Antonio	No	Yes	No

Source: GAO review of Health Resources and Services Administration data. | GAO-18-66R

Officials from the newly qualified hospitals highlighted characteristics of their hospitals and their residents that help address the needs of underserved communities. For example, officials from three newly qualified hospitals stated that they recruit GME residents that meet the demographic needs of their communities. Officials from two hospitals stated that they recruit individuals who speak Spanish or have an interest in serving a primarily Hispanic population to better serve their community. Additionally, officials from three hospitals stated that their hospitals serve underserved populations; one said that 50 percent of the community that the hospital serves is covered by Medicaid and another said that 75 percent or more of the hospital's patients are covered by Medicaid. Officials from some newly qualified hospitals noted that many of their graduates continue to practice in the area and have increased the number of providers in their community: one hospital official stated that prior to the establishment of his hospital, community members had to drive up to 6 hours to receive specialized pediatric care.

Agency Comments

We provided a draft of this report to HHS for comment. HHS provided technical comments, which we incorporated.

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If you or your staffs have any questions about this report, please contact me at (202) 512-7114 or cosgrovej@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report include Christine Brudevold, Assistant Director; William Hadley, Assistant Director; Akbar Husain; Elizabeth Morrison; Aubrey Naffis; and Jennifer Whitworth.

[15]Medically Underserved Areas are geographic areas, such as whole counties or urban census tracts, that have a shortage of primary care health services for the individuals who live there.

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