SECTION 7

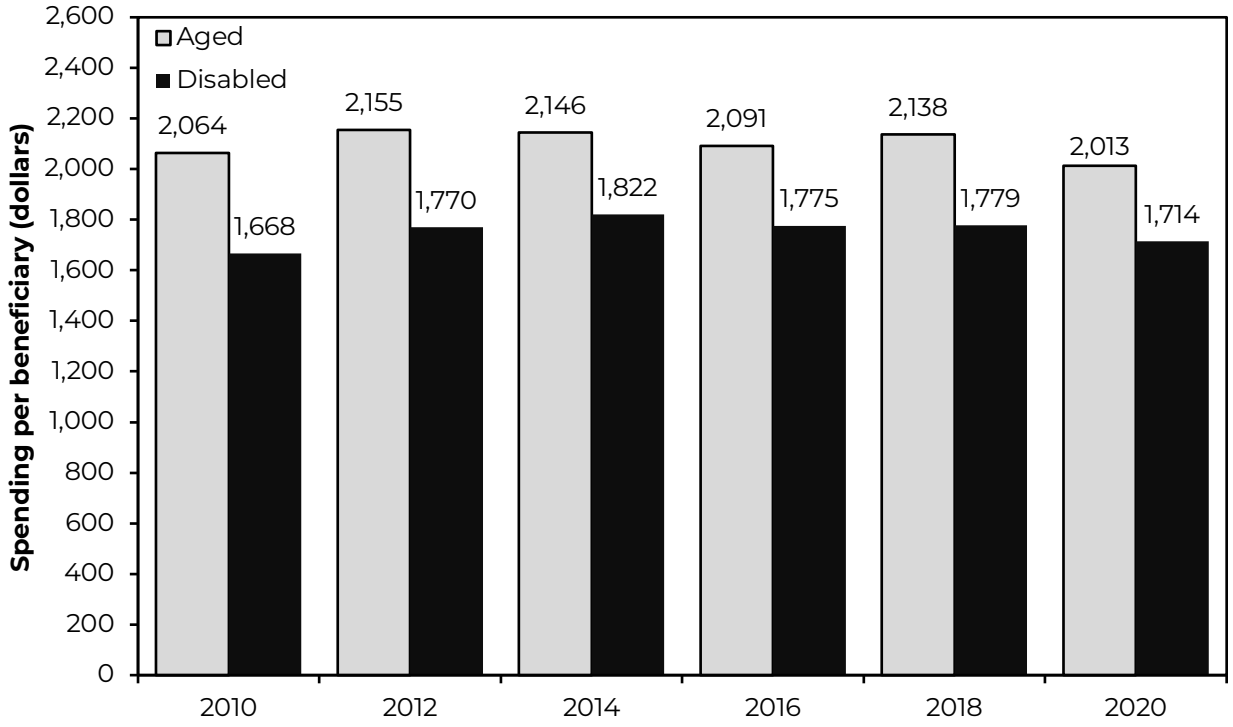
Ambulatory care

Physicians and other health professionals

Hospital outpatient services

Ambulatory surgical centers

Chart 7-1. Medicare spending per fee-for-service beneficiary on services in the physician fee schedule, 2010–2020



Note: Dollar amounts are Medicare spending only and do not include beneficiary cost sharing. The category "disabled" excludes beneficiaries who qualify for Medicare because they have end-stage renal disease. All beneficiaries ages 65 and over are included in the "aged" category.

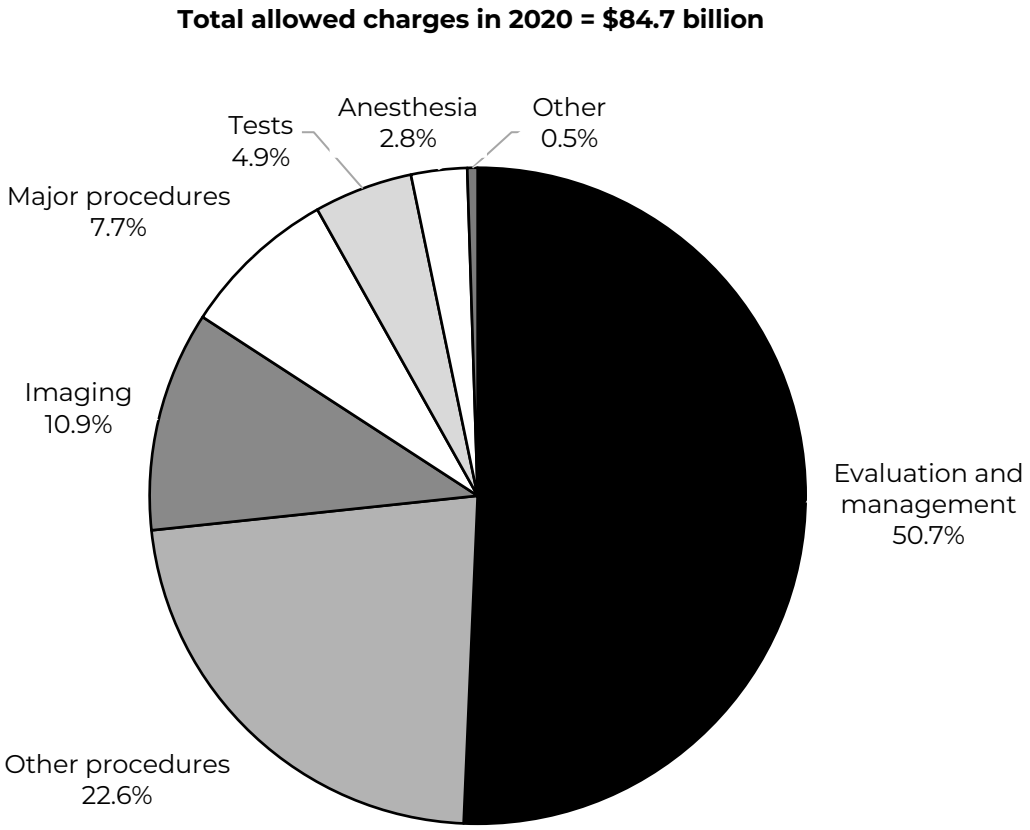
Source: The annual report of the Boards of Trustees of the Medicare trust funds 2021.

- The physician fee schedule includes a broad range of services such as office visits, surgical procedures, and diagnostic and therapeutic services. Total fee schedule spending (excluding beneficiary cost sharing) was $64.8 billion in 2020 (data not shown).

- Spending per fee-for-service beneficiary for fee schedule services increased between 2010 and 2012, remained stable between 2012 and 2018, and declined between 2018 and 2020 due to the effects of the coronavirus pandemic, which began in early 2020. From 2010 to 2020, spending per beneficiary (across aged beneficiaries and those with disabilities) declined by a cumulative rate of 1 percent.

- Per capita spending for beneficiaries with disabilities (under age 65) is lower than per capita spending for aged beneficiaries (ages 65 and over). In 2020, for example, per capita spending for beneficiaries with disabilities was $1,714 compared with $2,013 for aged beneficiaries. However, spending per capita grew faster for beneficiaries with disabilities than aged beneficiaries between 2010 and 2020 (3 percent vs. –2 percent, respectively).

Chart 7-2. Physician fee schedule–allowed charges by type of service, 2020



Note: Components may not sum to 100 percent due to rounding.

Source: MedPAC analysis of the Carrier Standard Analytic File for 100 percent of beneficiaries.

- In 2020, allowed charges for physician fee schedule services totaled $84.7 billion. "Allowed charges" includes both program spending and beneficiary cost sharing.
- In 2020, more than half of all allowed charges were for evaluation and management (E&M) services.
- Within the E&M category, about half of allowed charges were for office/outpatient visits. The remaining allowed charges within the E&M category were for various types of services provided across a broad range of settings, including hospital inpatient departments, emergency departments, and nursing facilities (data not shown).

Chart 7-3. Total encounters per FFS beneficiary fell in 2020 due to the coronavirus pandemic

	Encounters per beneficiary			Percent change in encounters per beneficiary		
				Average annual		
Specialty category	2015	2019	2020	2015–2019	2019–2020	Total
Total (all clinicians)	21.1	22.3	19.8	1.3%	–11.1%	–6.4%
Primary care physicians	3.8	3.5	3.1	–2.5	–10.9	–19.4
Specialists	12.7	19.9	11.4	0.4	–11.7	–10.1
APRNs/PAs	1.6	2.5	2.4	11.2	–2.7	48.8
Other practitioners	3.0	3.4	2.9	3.3	–15.1	–3.2

Note: FFS (fee-for-service), APRN (advanced practice registered nurse), PA (physician assistant). We define "encounters" as unique combinations of beneficiary identification numbers, claim identification numbers (for paid claims), and national provider identifiers of the clinicians who billed for the service. Components may not sum to totals due to rounding. Figures do not account for "incident to" billing, meaning, for example, that encounters with APRNs/PAs that are billed under Medicare's "incident to" rules are included in the physician totals. We use the number of FFS beneficiaries enrolled in Part B to define encounters per beneficiary.

Source: MedPAC analysis of the Carrier Standard Analytic File for 100 percent of beneficiaries and 2021 annual report of the Boards of Trustees of the Medicare trust funds.

- "Encounters" are a measure of beneficiary interactions with clinicians. For example, if a physician billed for an office visit and an X-ray on the same claim, we count that as one encounter.
- After rising over the 2015 to 2019 period, the overall number of encounters per beneficiary fell 11.1 percent from 2019 to 2020 due to the coronavirus pandemic.
- Encounters with specialist physicians accounted for the majority of all encounters. These encounters increased by an average of 0.4 percent per year between 2015 and 2019, but fell by 11.7 percent from 2019 to 2020.
- Encounters with APRNs and PAs grew rapidly from 2015 to 2020 (48.8 percent), and encounters with primary care physicians declined substantially (–19.4 percent). These changes continue a longer-term trend of declines in services billed by primary care physicians and rapid increases in services billed by APRNs and PAs.
- The decline in encounters with primary care physicians occurred across a broad range of services, including evaluation and management services, tests, procedures, and imaging services (data not shown).

Chart 7-4. The number of clinicians billing Medicare's physician fee schedule increased and the mix of clinicians changed, 2015–2020

	Number (in thousands)					Number per 1,000 beneficiaries				
	Physicians					Physicians				
Year	Primary care specialties	Other specialties	APRNs and PAs	Other practitioners	Total	Primary care specialties	Other specialties	APRNs and PAs	Other practitioners	Total
2015	141	439	178	161	919	2.8	8.7	3.5	3.2	18.1
2016	141	447	198	166	952	2.7	8.6	3.8	3.2	18.3
2017	140	455	218	172	985	2.6	8.5	4.1	3.2	18.4
2018	139	462	237	178	1,015	2.5	8.4	4.3	3.2	18.6
2019	139	468	258	184	1,048	2.5	8.4	4.6	3.3	18.7
2020	135	468	268	175	1,047	2.4	8.2	4.7	3.1	18.3

Note: APRN (advanced practice registered nurse), PA (physician assistant). "Primary care specialties" includes family medicine, internal medicine, pediatric medicine, and geriatric medicine, with an adjustment to exclude hospitalists. Hospitalists are counted in "other specialties." "Other practitioners" includes clinicians such as physical therapists, psychologists, social workers, and podiatrists. The number of clinicians shown in this table includes only those with a caseload of more than 15 beneficiaries in the year. Beneficiary counts used to calculate clinicians per 1,000 beneficiaries include beneficiaries enrolled in traditional Medicare Part B and those in Medicare Advantage, based on the assumption that clinicians generally furnish services to beneficiaries in both programs. Numbers exclude nonperson providers, such as clinical laboratories and independent diagnostic testing facilities.

Source: MedPAC analysis of Medicare claims data for 100 percent of beneficiaries and 2021 annual report of the Boards of Trustees of the Medicare trust funds.

- From 2015 to 2019, the total number of clinicians billing the fee schedule grew in absolute terms and relative to the size of the overall Medicare population. In 2020, the overall number of clinicians shrank slightly, likely due to the effects of the coronavirus pandemic.

- The total number of clinicians per 1,000 beneficiaries increased from 18.1 to 18.7 before falling to 18.3 in 2020. Although the ratio of clinicians to Medicare beneficiaries decreased in 2020, probably due to the pandemic, the effect on the overall supply of clinicians was relatively small and may be temporary.

- Over the 2015 to 2020 period, the number of primary care physicians billing the fee schedule slowly declined—yielding a net loss of about 6,000 primary care physicians by 2020. Over the same five-year period, the number of APRNs and PAs billing the fee schedule grew rapidly from about 178,000 to 268,000. The number of specialist physicians and other practitioners, such as physical therapists and podiatrists, who billed the fee schedule increased at a steady pace.

Chart 7-5. Medicare beneficiaries' ability to get timely appointments with physicians was comparable with that of privately insured individuals, 2018–2021

	Medicare (ages 65 and older)				Private insurance (ages 50–64)			
Survey question	2018	2019	2020	2021	2018	2019	2020	2021
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, "How often did you have to wait longer than you wanted to get a doctor's appointment?"								
For routine care								
Never	70%[a]	72%[b]	69%[a]	67%[a]	64%[ab]	74%[b]	73%[ab]	78%[a]
Sometimes	20[ab]	20[b]	22[a]	23[a]	26[ab]	19	20[ab]	17[a]
Usually	5	3[b]	3[b]	5[a]	5[b]	4[b]	4[b]	3[a]
Always	3[a]	3	3	3[a]	4[ab]	3[b]	3[b]	2[a]
For illness or injury								
Never	79[a]	80	79	78[a]	74[ab]	81	80[b]	83[a]
Sometimes	15[a]	14	15	16[a]	19[ab]	15	15	13[a]
Usually	2	2	2	2	3[b]	2	3	2
Always	2	2	2	2	2	1	2	1

Note: Components may not sum to 100 percent because of rounding and because the table excludes the following responses: "Don't Know" and "Refused." Sample sizes for each group (Medicare and private insurance) were approximately 4,000 each year. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65.

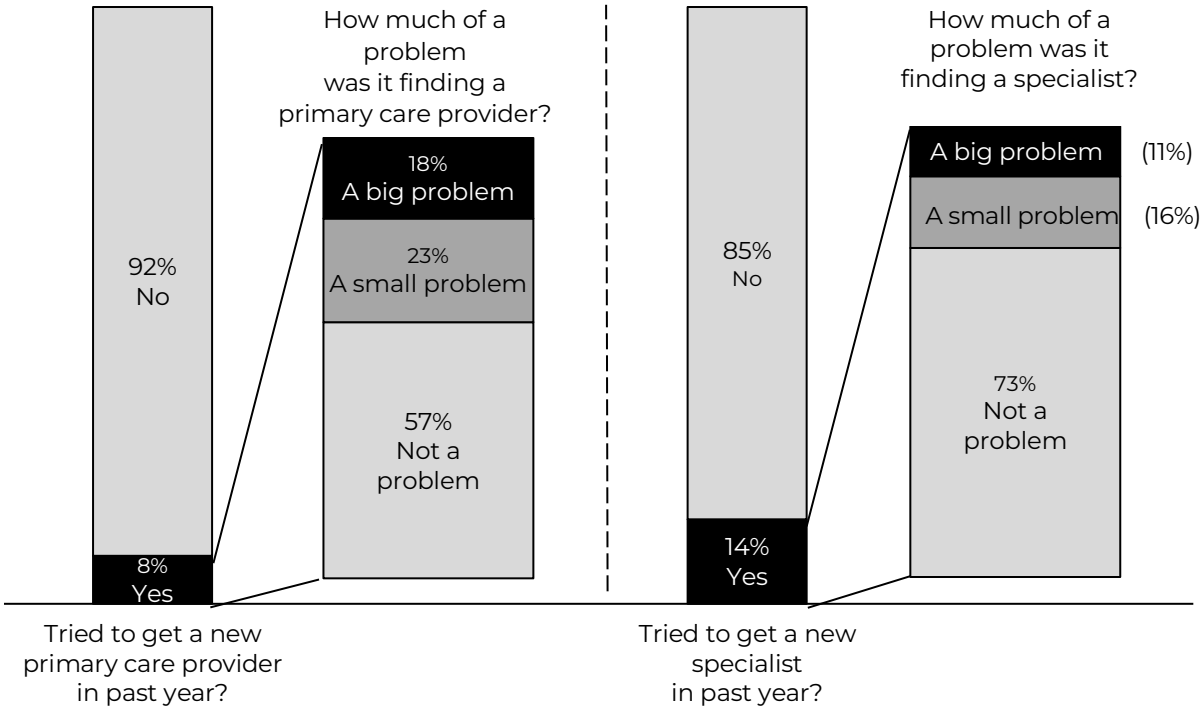
[a] Statistically significant difference between the Medicare and private insurance groups in the given year (at a 95 percent confidence level).

[b] Statistically significant difference from 2021 within the same insurance category (at a 95 percent confidence level).

Source: MedPAC-sponsored annual telephone surveys conducted 2018–2021.

- Most Medicare beneficiaries have one or more doctor appointments in a given year. Their ability to schedule timely appointments is one indicator of access that we examine in our annual survey.
- Before the COVID-19 pandemic, comparable shares of Medicare beneficiaries ages 65 and over and privately insured individuals ages 50 to 64 reported that they never had to wait longer than they wanted to get a doctor's appointment for routine care or for an illness or injury. During the pandemic, Medicare beneficiaries were less likely to report never having to wait for an appointment compared to younger privately insured people, which may reflect decisions by beneficiaries and/or their clinicians to put off nonurgent care during the pandemic given elderly individuals' elevated risk of death from COVID-19.
- Appointment scheduling for illness or injury is consistently better than for routine care appointments, for both Medicare beneficiaries and privately insured individuals, suggesting clinicians prioritize making these more urgent types of appointments available on a timely basis.

Chart 7-6. Medicare beneficiaries had more problems finding a new primary care provider than a new specialist, 2021



Note: Components may not sum to 100 percent because the figure does not show the share of respondents who said they didn't know or refused to answer. Overall sample size for Medicare beneficiaries was approximately 4,000. Survey includes beneficiaries enrolled in traditional fee-for-service Medicare or Medicare Advantage.

Source: MedPAC's annual access-to-care telephone survey conducted In 2021.

- In 2021, only 8 percent of Medicare beneficiaries reported looking for a new primary care provider. This finding suggests that most beneficiaries were satisfied with their current provider and did not need to look for a new one.
- In 2021, among Medicare beneficiaries looking for a new clinician, beneficiaries were more likely to report problems finding a new primary care provider than a new specialist.
- Of the 8 percent of Medicare beneficiaries who looked for a new primary care provider in 2021, 23 percent reported a "big problem" finding a new one, and another 18 percent reported a "small problem" finding a new one. Although this finding means that only 3 percent of the total Medicare population reported problems finding a new primary care provider, the Commission is concerned about the continuing pattern of greater problems accessing primary care than specialty care. We have observed this trend in our annual survey for many years, among both Medicare beneficiaries and privately insured people (data not shown).

Chart 7-7. More Black beneficiaries waited longer than they wanted for appointments compared with White beneficiaries, 2021

	Medicare (ages 65 and older)			Private insurance (ages 50–64)		
Survey question	White	Black	Hispanic	White	Black	Hispanic
Unwanted delay in getting an appointment: Among those who needed an appointment in the past 12 months, "How often did you have to wait longer than you wanted to get a doctor's appointment?"						
For routine care						
Never	69%[ab]	57%[b]	60%[ab]	82%[ab]	66%[b]	72%[ab]
Sometimes	23[a]	27	24	14[ab]	27[b]	22[b]
Usually	4[a]	6	5	2[a]	3	4
Always	2[b]	6[ab]	7[ab]	1	2[a]	1[a]
For illness or injury						
Never	80[ab]	68[ab]	77	85[ab]	78[ab]	80
Sometimes	16[ab]	23[b]	16	12[ab]	18[b]	14
Usually	2	3[b]	0[ab]	1[b]	3	3[ab]
Always	2[b]	4[ab]	4[b]	1	1[a]	1

Note: Components may not sum to 100 percent because of rounding and because the table excludes the following responses: "Don't Know" and "Refused." "White" refers to non-Hispanic White respondents. "Black" refers to non-Hispanic Black respondents. "Hispanic" refers to Hispanic respondents of any race. The small size of our survey prevents us from breaking out results for other races. Sample sizes for each insurance group (Medicare and private insurance) were approximately 4,000 in 2021. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65.

[a] Statistically significant difference between the Medicare and private insurance groups (at a 95 percent confidence level).

[b] Statistically significant difference by race/ethnicity within the same insurance category (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone survey conducted in 2021.

- In 2021, White respondents were more likely than Black respondents to report that they never had to wait longer than they wanted to get an appointment for an illness or injury.
- White respondents were more likely than Black or Hispanic respondents to report that they never had to wait longer than they wanted to get an appointment for routine care.
- These trends were observed both for Medicare beneficiaries and for privately insured individuals.

Chart 7-8. There were few statistically significant differences in the shares of White, Black, and Hispanic beneficiaries who reported problems finding a new primary care provider or specialist, 2021

	Medicare (ages 65 and older)			Private insurance (ages 50–64)		
Survey question	White	Black	Hispanic	White	Black	Hispanic
Looking for a new provider: "In the past 12 months, have you tried to get a new …?"						
Primary care provider	7%	9%	11%	6%	6%	6%
Specialist	14[a]	12	16	10[a]	9	11
Getting a new provider: Among those who tried to get an appointment with a new provider, "How much of a problem was it finding a primary care provider/specialist who would treat you? Was it … ?"						
Primary care provider						
No problem	56	71	56	58	73[b]	37[b]
(Share overall)	*4*	*6*	*6[a]*	*4*	*4*	*2[a]*
Small problem	25	12	24	26	22	32
(Share overall)	*2*	*1*	*2*	*2*	*1*	*2*
Big problem	17	17	20	16	5	30
(Share overall)	*1*	*2*	*2*	*1*	*0*	*2*
Specialist						
No problem	73	70	79	74	87	76
(Share overall)	*10[a]*	*9*	*13*	*8[a]*	*8*	*8*
Small problem	15	4	18	17	7	20
(Share overall)	*2*	*0[b]*	*3[b]*	*2*	*1*	*2*
Big problem	11[b]	26[ab]	3[b]	9	6[a]	4
(Share overall)	*1[b]*	*3[ab]*	*0[b]*	*1*	*1[a]*	*0*

Note: Totals may not sum to 100 percent because of rounding and because the table excludes the following responses: "Don't Know" and "Refused." "White" refers to non-Hispanic White respondents. "Black" refers to non-Hispanic Black respondents. "Hispanic" refers to Hispanic respondents of any race. The small size of our survey prevents us from breaking out results for other races. Sample sizes for each insurance group (Medicare and private insurance) were approximately 4,000 in 2021. Sample sizes for individual questions varied. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65. "Share overall" refers to the share of total insurance group, by race.

[a] Statistically significant difference between the Medicare and private insurance groups (at a 95 percent confidence level).

[b] Statistically significant difference by race/ethnicity within the same insurance category (at a 95 percent confidence level).

Source: MedPAC-sponsored telephone survey conducted in 2021.

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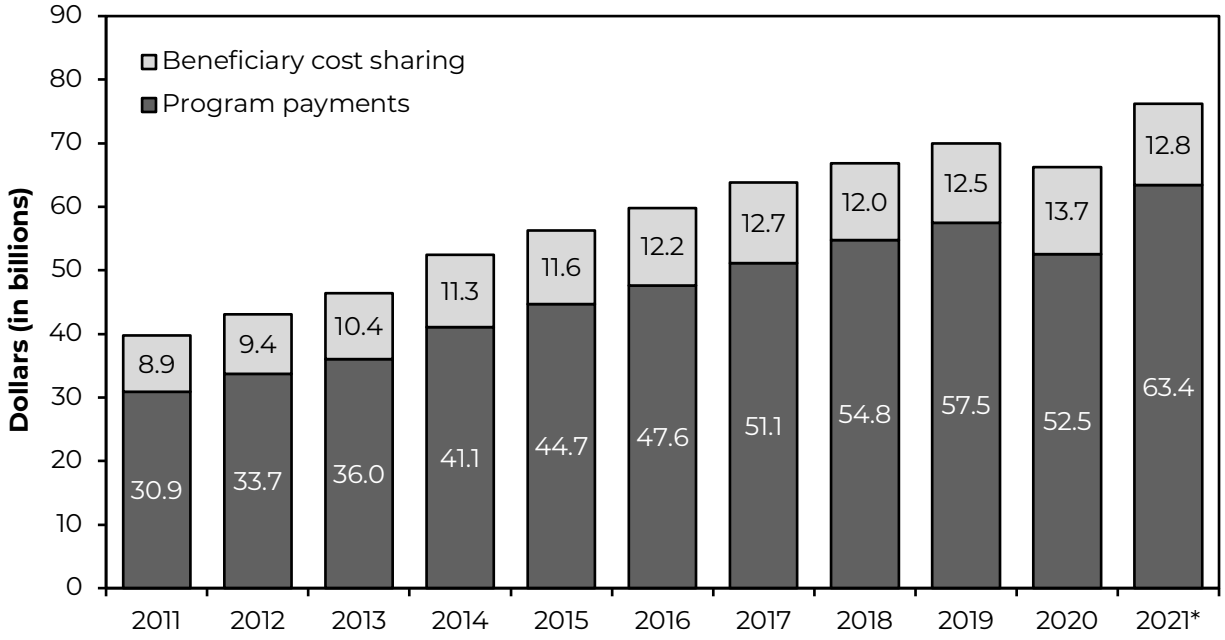
Chart 7-8. There were few statistically significant differences in the shares of White, Black, and Hispanic beneficiaries who reported problems finding a new primary care provider or specialist, 2021 (continued)

- In 2021, our survey found no statistically significant differences in the shares of Medicare beneficiaries of different races and ethnicities who tried to find a new primary care provider or a new specialist in the past year.

- Our survey also found no statistically significant differences in shares of Medicare beneficiaries of different races and ethnicities who reported problems finding a new primary care provider.

- There were no statistically significant differences in the shares of Medicare beneficiaries of different races and ethnicities who reported a problem finding a new specialist. However, among those who did report a problem, Black beneficiaries were more likely than other groups to report having a “big problem” (as opposed to a “small problem”).

Chart 7-9. Spending on hospital outpatient services covered under the outpatient PPS, 2011–2021



Note: PPS (prospective payment system). Spending amounts are for services covered by the Medicare outpatient PPS. They do not include services paid on separate fee schedules (e.g., ambulance services and durable medical equipment) or those paid on a cost basis (e.g., corneal tissue acquisition and flu vaccines) or payments for clinical laboratory services, except those packaged into payment bundles.
* Estimated figures.

Source: CMS, Office of the Actuary.

- The Office of the Actuary estimates that spending under the outpatient PPS was $76.2 billion in 2021 ($63.4 billion in program spending, $12.8 billion in beneficiary copayments). We estimate that the outpatient PPS accounted for about 7 percent of total Medicare program spending in 2021 (data not shown).
- From calendar year 2011 to 2021, overall spending by Medicare and beneficiaries on hospital outpatient services covered under the outpatient PPS increased by 91 percent, an average of 6.7 percent per year. The Office of the Actuary projects continued growth in total spending, averaging 8.0 percent per year from 2021 to 2023 (data not shown).
- Beneficiary cost sharing under the outpatient PPS includes the Part B deductible and coinsurance for each service. Under the outpatient PPS, beneficiary cost sharing was about 17 percent in 2021 (data not shown).

Chart 7-10. Most hospitals provide outpatient services

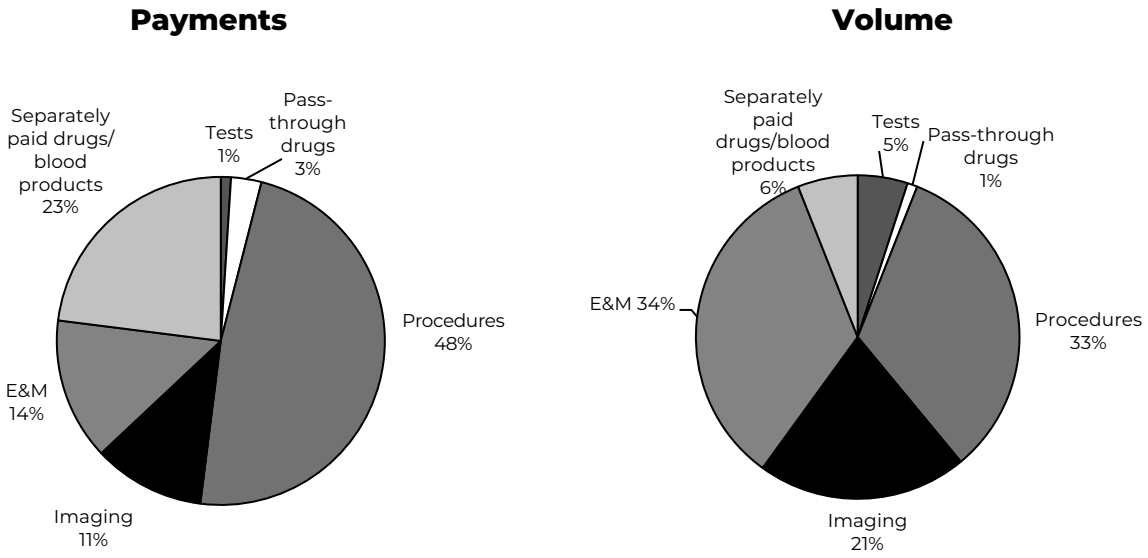
Year	Acute care hospitals	Share offering		
		Outpatient services	Outpatient surgery	Emergency services
2008	3,607	94%	87%	N/A
2010	3,518	95	90	N/A
2012	3,483	95	91	93%
2014	3,429	96	92	93
2016	3,370	96	93	93
2018	3,301	96	93	90
2020	3,194	96	93	91
2021	3,189	96	93	91

Note: N/A (not applicable). We list emergency services for 2008 and 2010 as "N/A" because the data source we used in this chart changed the variable for identifying hospitals' provision of emergency services. This change in variable definition makes it appear that the share of hospitals providing emergency services increased sharply from 2010 to 2012, but we question whether such a large increase actually occurred. This chart includes services provided or arranged by acute care short-term hospitals and excludes long-term, Christian Science, psychiatric, rehabilitation, children's, critical access, and alcohol/drug hospitals.

Source: Medicare Provider of Services files from CMS.

- The number of hospitals that furnish services under Medicare's outpatient prospective payment system declined slowly from 3,607 in 2008 to 3,189 in 2021.
- The share of hospitals providing outpatient services remained stable, and the share offering outpatient surgery steadily increased from 2008 through 2014 and has remained stable since then. The share offering emergency services declined slightly from 2016 to 2018.

Chart 7-11. Payments and volume of services under the Medicare hospital outpatient PPS, by type of service, 2020



Note: PPS (prospective payment system), E&M (evaluation and management). "Payments" includes both program spending and beneficiary cost sharing. We grouped services into the following categories, according to the Berenson-Eggers Type of Service codes developed by CMS: evaluation and management, procedures, imaging, and tests. "Pass-through drugs" and "separately paid drugs/blood products" are classified by their payment status indicator. The components in neither figure sum to 100 percent due to rounding. The share for each type of service changed substantially from the shares reported in the 2021 data book because we changed how we calculate the volume for the drug categories. For the 2021 data book, we calculated the volume in the drug categories as the sum of the number of units for each drug. In this chart, we calculated the volume in the drug categories as the sum of the number of times each drug was administered.

Source: MedPAC analysis of standard analytic file of outpatient claims for 2020.

- Hospitals provide many types of services in their outpatient departments, including emergency and clinic visits, imaging and other diagnostic services, laboratory tests, and ambulatory surgery.

- The payments for services are distributed differently from volume. For example, in 2020, procedures accounted for 48 percent of payments but only 33 percent of volume.

- Procedures (e.g., endoscopies, surgeries, and skin and musculoskeletal procedures) accounted for the greatest share of payments for services (48 percent) in 2020, followed by separately paid drugs and blood products (23 percent), E&M services (14 percent), and imaging services (11 percent). The share attributable to E&M services dropped from the 2019 level (19 percent, data not shown) because clinic and emergency department visits decreased sharply as patients responded to the coronavirus pandemic.

Chart 7-12. Hospital outpatient services with the highest Medicare expenditures, 2020

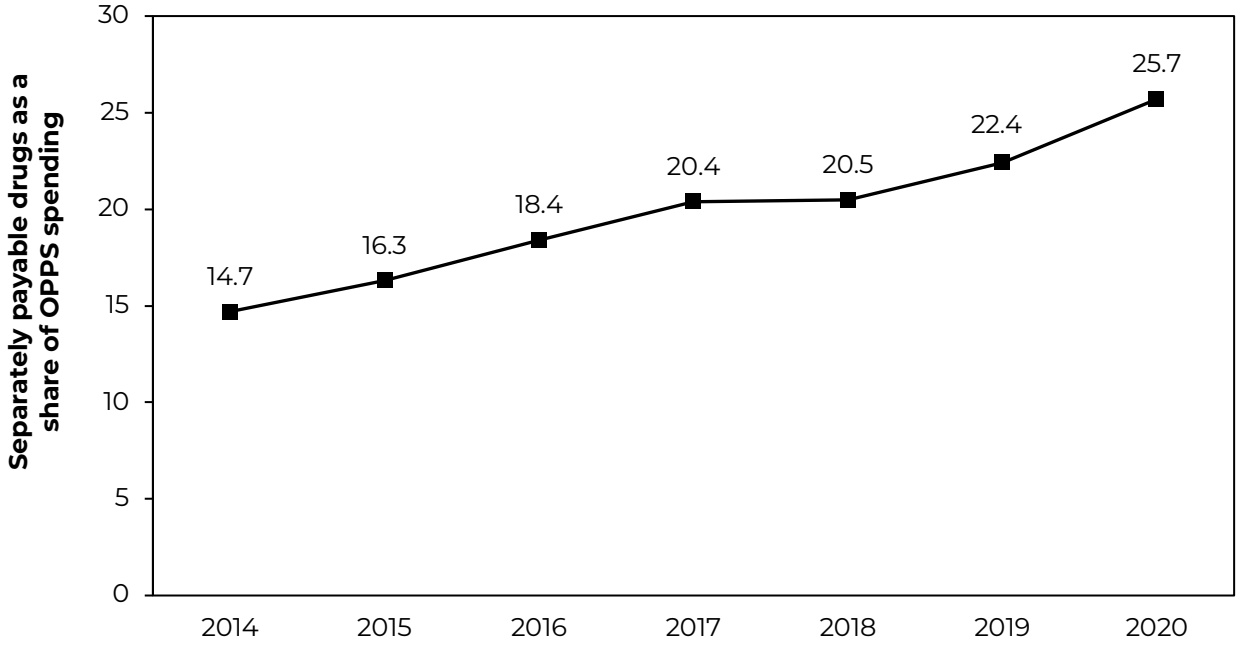
APC title	Share of Medicare expenditures	Volume (thousands)	Payment rate
Total	49%		
All emergency visits	5	9,442	$343
Level 5 musculoskeletal procedures	5	255	11,901
Clinic visits	4	24,385	116
Comprehensive observation services	4	1,012	2,204
Level 3 electrophysiologic procedures	2	68	20,435
Level 3 endovascular procedures	2	134	9,908
Level 4 musculoskeletal procedures	2	185	5,982
Level 2 ICD and similar procedures	2	33	32,283
Level 3 drug administration	2	5,341	184
Level 3 radiation therapy	2	1,786	539
Level 2 imaging with contrast	1	2,085	382
Level 1 endovascular procedures	1	276	2,850
Level 1 laparoscopy and related procedures	1	164	4,834
Level 4 drug administration	1	2,476	310
Level 4 endovascular procedures	1	50	15,940
Level 4 imaging without contrast	1	1,552	482
Level 2 imaging without contrast	1	6,604	112
Level 3 nuclear medicine and related services	1	564	1,272
Level 3 pacemaker and similar procedures	1	65	10,252
Level 2 lower GI procedures	1	740	1,004
Level 3 imaging without contrast	1	2,760	233
Level 1 intraocular procedures	1	305	2,022
Level 4 intraocular procedures	1	404	1,443
Level 5 urology and related services	1	136	4,232
Level 2 laparoscopy and related procedures	1	69	8,413
Level 3 vascular procedures	1	201	2,771
Level 1 imaging without contrast	1	6,842	80
Level 1 upper GI procedures	1	768	786
Average APC		626	$410

Note: APC (ambulatory payment classification), ICD (implantable cardioverter-defibrillator), GI (gastrointestinal). The payment rate for "all emergency visits" is a weighted average of payment rates for 10 emergency visit APCs (not listed on this chart). The shares of payments for the 28 APC categories do not add to the total share of payments (49 percent) because of rounding. The average APC figures in the last line represent averages for all APCs.

Source: MedPAC analysis of 100 percent analytic files of outpatient claims for calendar year 2020.

- Although the outpatient prospective payment system covers thousands of services, expenditures are concentrated in a few categories that have high volume, high payment rates, or both.

Chart 7-13. Separately payable drugs have increased as a share of total spending in the outpatient prospective payment system, 2014–2020



Note: OPPS (outpatient prospective payment system).

Source: MedPAC analysis of hospital outpatient standard analytic claims files from 2014 through 2020.

- The OPPS packages the cost of most drugs into the payment for the related services. However, the OPPS has two programs that provide separate payment for higher cost drugs: the pass-through program, which is focused on drugs that are new to the market, and the program for separately payable non-pass-through (SPNPT) drugs, which is focused on drugs that have been established in the drug market. Pass-through drugs can hold that status for two to three years, after which they can become SPNPT drugs. Most SPNPT drugs were previously pass-through drugs.

- Separately payable drugs have become an increasingly large share of OPPS spending, increasing from 14.7 percent in 2014 to 25.7 percent in 2020.

- The share of OPPS spending attributable to separately payable drugs increased each year from 2014 to 2020, but the increase was relatively small from 2017 to 2018. The small increase during that period was the result of a policy implemented by CMS that substantially decreased the payment rates for SPNPT drugs that hospitals obtained through the 340B Drug Pricing Program. Without that policy, we estimate that separately payable drugs would have been 22.7 percent of OPPS spending in 2018 and 24.8 percent in 2019.

Chart 7-14. Number of Medicare-certified ASCs increased by 11 percent, 2014–2020

	2014	2015	2016	2017	2018	2019	2020
Medicare payments (billions of dollars)	$3.8	$4.1	$4.3	$4.6	$4.9	$5.2	$4.9
New centers (during year)	189	170	171	217	236	240	174
Closed or merged centers (during year)	123	110	101	102	111	91	55
Net total number of centers (end of year)	5,292	5,352	5,422	5,537	5,662	5,811	5,930
Net percent growth in number of centers	1.3%	1.1%	1.3%	2.1%	2.3%	2.6%	2.0%
Share of all centers that are:							
For profit	95	95	95	95	95	95	95
Nonprofit	4	4	4	4	4	4	4
Government	2	2	1	1	1	1	1
Urban	93	93	93	93	93	93	93
Rural	7	7	7	7	7	7	7

Note: ASC (ambulatory surgical center). Medicare payments include program spending and beneficiary cost sharing for ASC facility services. Some figures differ from Chart 7-14 in our 2021 data book because CMS updated the Provider of Services file. Some components may not sum to 100 percent due to rounding.

Source: MedPAC analysis of Provider of Services file from CMS 2021. Payment data are from CMS, Office of the Actuary.

- ASCs are distinct entities that furnish ambulatory surgical services not requiring an overnight stay in a hospital. The most common ASC procedures are cataract removal with lens insertion, upper gastrointestinal endoscopy, colonoscopy, and nerve procedures.
- Total Medicare payments per fee-for-service (FFS) Medicare beneficiary for ASC services increased by approximately 5 percent per year, on average, from 2014 through 2020 (data not shown). Payments per FFS beneficiary served in an ASC grew by 6.5 percent per year during this period. From 2019 to 2020, total payments per FFS beneficiary dropped by 3.9 percent, and payments per beneficiary grew by 10.2 percent (per beneficiary data not shown).
- The number of Medicare-certified ASCs grew at an average annual rate of 1.9 percent from 2014 through 2020. In this same period, an annual average of 200 new facilities entered the market, while an average of 99 closed or merged with other facilities.

Chart 7-15. Between 35 and 74 low-value services were provided per 100 FFS beneficiaries in 2019; Medicare spent between $2.5 billion and $7.3 billion on these services

	Broader version of measure			Narrower version of measure		
Measure	Count per 100 beneficiaries	Share of beneficiaries affected	Spending (millions)	Count per 100 beneficiaries	Share of beneficiaries affected	Spending (millions)
Imaging for nonspecific low back pain	13.2	9.6%	$280	3.7	3.3%	$78
PSA screening at age > 75 years	9.0	6.1	87	5.1	4.2	49
Spinal injection for low back pain	7.2	3.8	1,509	3.2	1.9	674
Colon cancer screening for older adults	6.9	6.6	437	0.2	0.2	3
PTH testing in early CKD	6.0	3.6	122	5.0	3.1	102
Carotid artery disease screening in asymptomatic adults	4.9	4.5	284	3.9	3.6	226
T3 level testing for patients with hypothyroidism	4.7	2.7	31	4.7	2.7	31
Preoperative chest radiography	3.9	3.6	63	0.9	0.9	15
Head imaging for uncomplicated headache	3.9	3.5	284	2.4	2.2	176
Stress testing for stable coronary disease	3.9	3.7	1,183	0.4	0.4	139
Cervical cancer screening at age > 65 years	1.6	1.6	37	1.5	1.5	33
Head imaging for syncope	1.2	1.2	89	0.7	0.7	55
Homocysteine testing in cardiovascular disease	1.2	1.0	11	0.2	0.2	2
Preoperative echocardiography	1.0	0.9	85	0.3	0.3	26
Preoperative stress testing	0.7	0.6	201	0.2	0.2	62
CT for uncomplicated rhinosinusitis	0.6	0.6	48	0.3	0.3	20
Imaging for plantar fasciitis	0.5	0.5	11	0.3	0.3	4
Screening for carotid artery disease for syncope	0.5	0.5	30	0.4	0.4	22
BMD testing at frequent intervals	0.5	0.5	12	0.3	0.3	8
Vitamin D testing in absence of hypercalcemia or decreased kidney function	0.4	0.4	7	0.4	0.4	7
Cancer screening for patients with CKD on dialysis	0.4	0.3	11	0.1	0.1	2
PCI/stenting for stable coronary disease	0.3	0.3	1,545	0.1	0.1	271
Arthroscopic surgery for knee osteoarthritis	0.2	0.2	183	0.03	0.03	32
Preoperative PFT	0.2	0.2	2	0.1	0.1	1
Vertebroplasty/kyphoplasty for osteoporotic vertebral fractures	0.2	0.2	359	0.2	0.2	351
Hypercoagulability testing after DVT	0.2	0.1	6	0.1	0.1	2
IVC filter to prevent pulmonary embolism	0.1	0.1	20	0.1	0.1	20
Renal artery angioplasty/stenting	0.1	0.1	182	0.02	0.02	43
EEG for headache	0.1	0.1	4	0.03	0.03	2
Carotid endarterectomy for asymptomatic patients	0.1	0.1	147	0.02	0.02	60
Pulmonary artery catheterization in ICU	0.01	0.01	0.2	0.01	0.01	0.2
Total	73.7	37.4	7,371	34.9	22.6	2,549

(Chart continued next page)

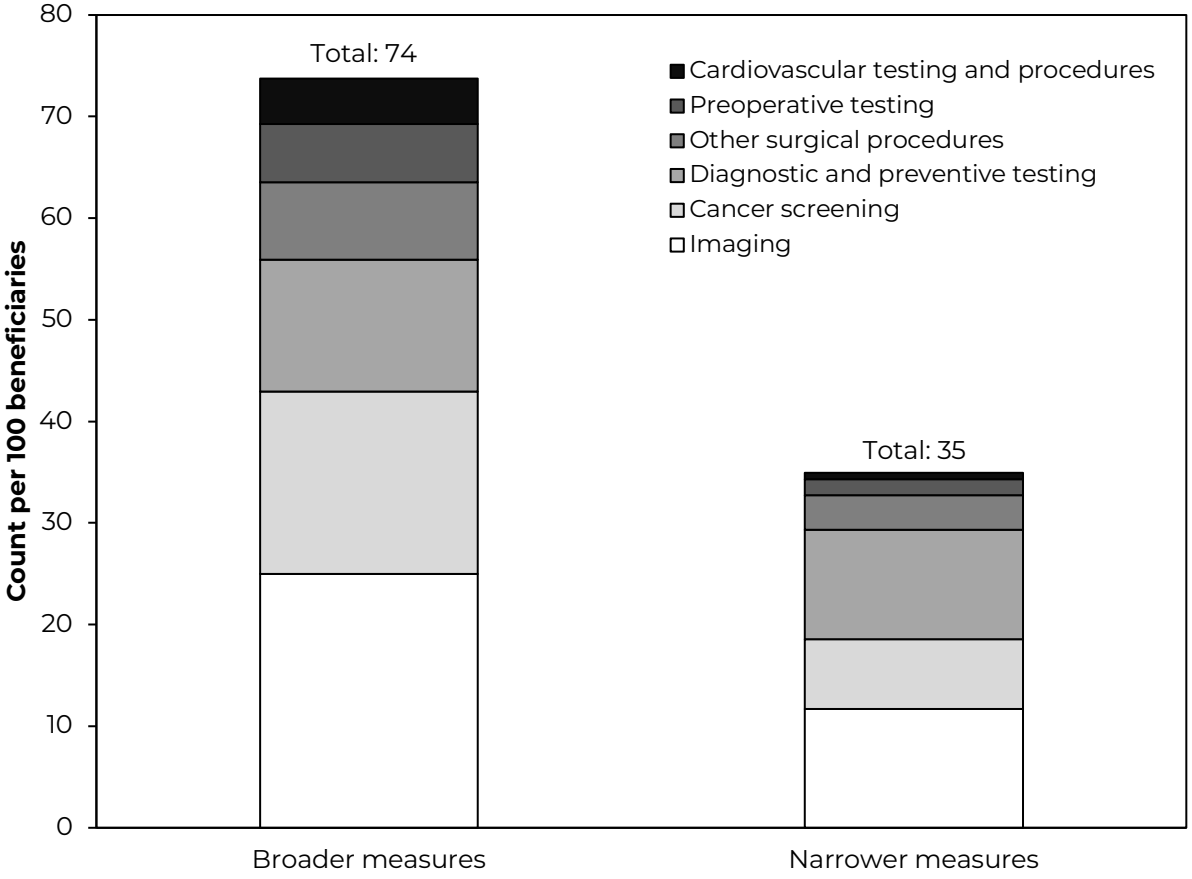
Chart 7-15. Between 35 and 74 low-value services were provided per 100 FFS beneficiaries in 2019; Medicare spent between $2.5 billion and $7.3 billion on these services (continued)

Note: FFS (fee-for-service), PSA (prostate-specific antigen), PTH (parathyroid hormone), CKD (chronic kidney disease), CT (computed tomography), BMD (bone mineral density), PCI (percutaneous coronary intervention), PFT (pulmonary function test), DVT (deep vein thrombosis), IVC (inferior vena cava), EEG (electroencephalography), ICU (intensive care unit). "Count" refers to the number of unique services. Components may not sum to totals due to rounding. The total for "share of beneficiaries affected" does not equal the column sum because some beneficiaries received services covered by multiple measures. "Spending" includes Medicare Part A and Part B program spending and beneficiary cost sharing for services detected by measures of low-value care. Spending is based on a standardized price for each service from 2009 that was updated to 2019. The broad and narrow versions of the measures for T3 level testing for patients with hypothyroidism and IVC filter to prevent pulmonary embolism are the same.

Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (Schwartz, A. L., M. E. Chernew, B. E. Landon, et al. 2015. Changes in low-value services in year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Internal Medicine* 175: 1815–1825; Schwartz, A. L., B. E. Landon, A. G. Elshaug, et al. 2014. Measuring low-value care in Medicare. *JAMA Internal Medicine* 174: 1067–1076).

- Low-value care is the provision of a service that has little or no clinical benefit or care in which the risk of harm from the service outweighs its potential benefit.
- The 31 measures of low-value care in this chart were developed by a team of researchers. The measures are drawn from evidence-based lists—such as Choosing Wisely—and the medical literature. We applied these measures to 100 percent of Medicare claims data from 2019. These 31 measures do not represent *all* instances of low-value care; the actual number (and corresponding spending) may be much higher.
- The researchers developed two versions of each measure: a broader version (more sensitive, less specific) and a narrower version (less sensitive, more specific). Increasing the sensitivity of a measure captures more potentially inappropriate use but is also more likely to misclassify some appropriate use as inappropriate. Increasing a measure's specificity leads to less misclassification of appropriate use as inappropriate at the expense of potentially missing some instances of inappropriate use.
- Based on the broader versions of the measures, our analysis found about 74 instances of low-value care per 100 beneficiaries in 2019, with about 37 percent of beneficiaries receiving at least 1 low-value service that year. Medicare spending for these services was $7.3 billion. Based on the narrower versions of the measures, our analysis showed about 35 instances of low-value care per 100 beneficiaries, with almost 23 percent of beneficiaries receiving at least 1 low-value service. Medicare spending for these services totaled about $2.5 billion.

Chart 7-16. Imaging, cancer screening, and diagnostic and preventive testing accounted for most of the volume of low-value care in 2019

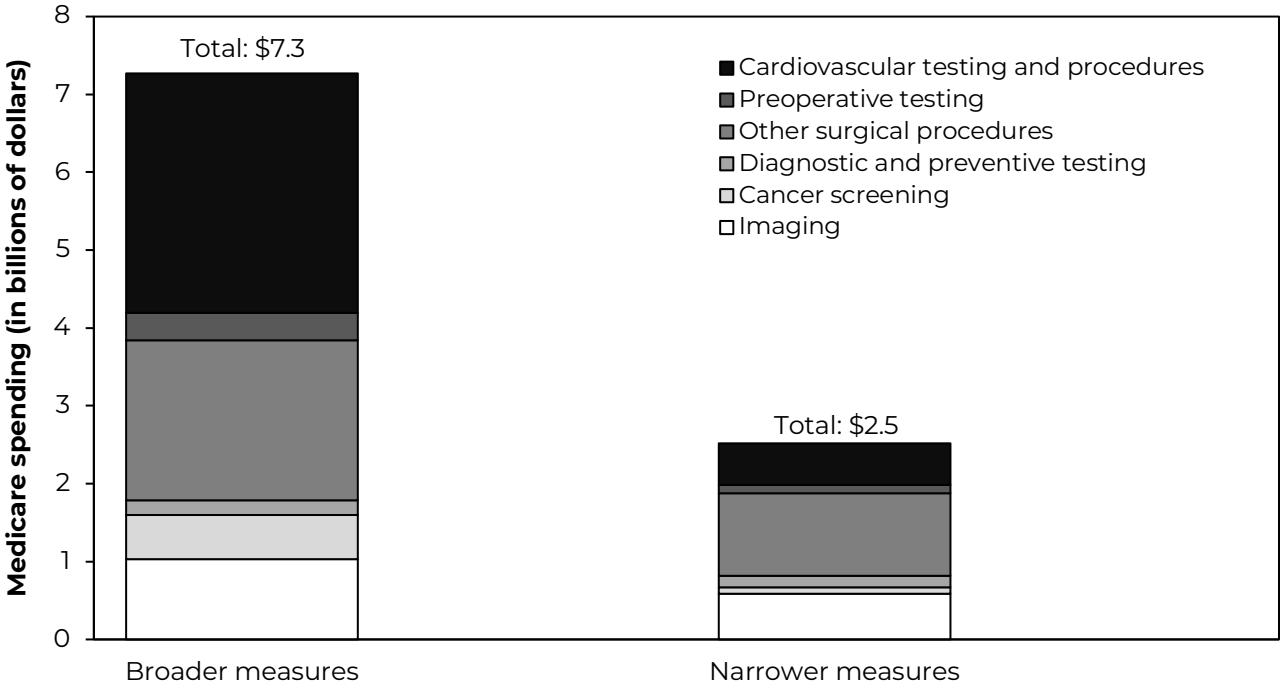


Note: "Count" refers to the number of unique services provided to fee-for-service Medicare beneficiaries.

Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (Schwartz, A. L., M. E. Chernew, B. E. Landon, et al. 2015. Changes in low-value services in year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Internal Medicine* 175: 1815–1825; Schwartz, A. L., B. E. Landon, A. G. Elshaug, et al. 2014. Measuring low-value care in Medicare. *JAMA Internal Medicine* 174: 1067–1076).

- We assigned each of the 31 measures of low-value care from Chart 7-15 to 1 of 6 clinical categories.
- Imaging and cancer screening accounted for 58 percent of the volume of low-value care per 100 beneficiaries using the broader versions of the measures. The "imaging" category includes back imaging for patients with nonspecific low back pain and screening for carotid artery disease in asymptomatic adults. The "cancer screening" category includes prostate-specific antigen testing for men ages 75 or older and colorectal cancer screening for older adults.
- Using the narrower versions of the measures, imaging and diagnostic and preventive testing accounted for 64 percent of the volume of low-value care per 100 beneficiaries.

Chart 7-17. Cardiovascular testing and procedures, other surgical procedures, and imaging accounted for most spending on low-value care in 2019



Note: "Spending" includes Medicare Part A and Part B program spending and beneficiary cost sharing for services detected by measures of low-value care. To estimate spending, we used standardized prices to adjust for regional differences in payment rates. The standardized price is the median payment amount per service in 2009, adjusted for the increase in payment rates between 2009 and 2019. This method was developed by Schwartz et al. (2014).

Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (Schwartz, A. L., M. E. Chernew, B. E. Landon, et al. 2015. Changes in low-value services in year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Internal Medicine* 175: 1815–1825; Schwartz, A. L., B. E. Landon, A. G. Elshaug, et al. 2014. Measuring low-value care in Medicare. *JAMA Internal Medicine* 174: 1067–1076).

- Cardiovascular testing and procedures and other surgical procedures accounted for 71 percent of total spending on low-value care using the broader measures. Other surgical procedures and imaging made up nearly two-thirds of spending on low-value care using the narrower measures.
- The "cardiovascular testing and procedures" category includes stress testing for stable coronary disease and percutaneous coronary intervention with balloon angioplasty or stent placement for stable coronary disease. The "other surgical procedures" category includes spinal injection for low back pain and arthroscopic surgery for knee osteoarthritis. The "imaging" category includes back imaging for patients with nonspecific low back pain and screening for carotid artery disease in asymptomatic adults.
- The spending estimates probably understate actual spending on low-value care because they do not include the cost of downstream services (e.g., follow-up tests and procedures) that may result from the initial low-value service. Also, we are not capturing *all* low-value care through these 31 measures.