SECTION

7

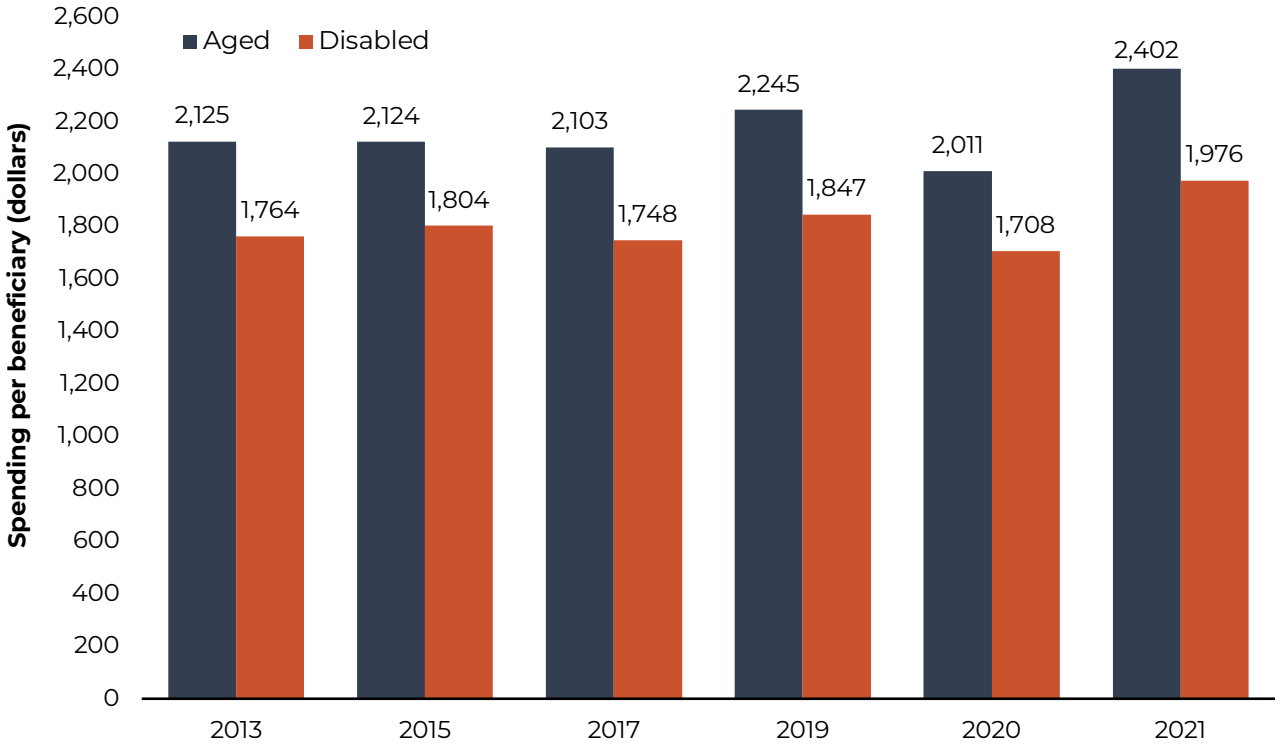
Ambulatory care

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, 2013–2021



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.

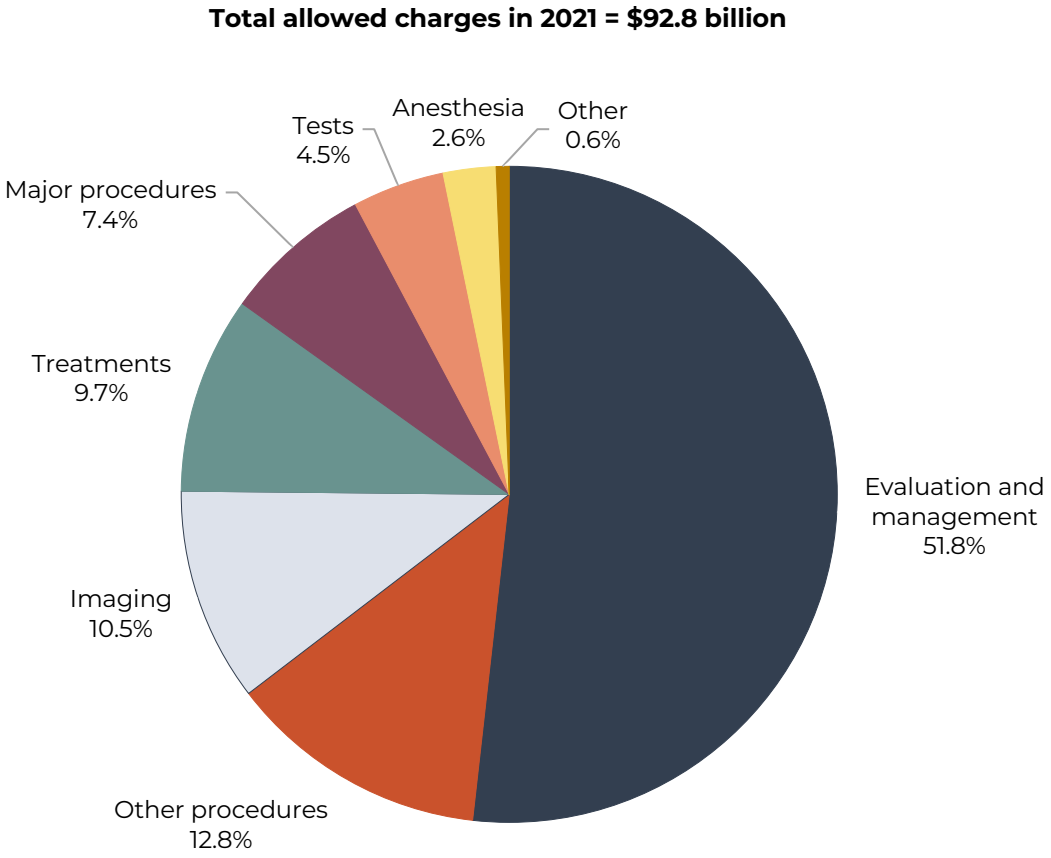
Source: The annual report of the Boards of Trustees of the Medicare trust funds 2022.

> 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 $73.6 billion in 2021 (data not shown).

> Spending per fee-for-service beneficiary for fee schedule services remained largely stable between 2013 and 2017, then increased in 2019. Spending per fee-for-service beneficiary declined in 2020 due to the effects of the coronavirus pandemic and then rebounded between 2020 and 2021. From 2013 to 2021, spending per beneficiary (for both aged beneficiaries and those with disabilities) increased by a cumulative rate of 14 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 2021, for example, per capita spending for beneficiaries with disabilities was $1,976 compared with $2,402 for aged beneficiaries. Spending per capita grew at nearly the same rate for aged beneficiaries and beneficiaries with disabilities between 2013 and 2021.

Chart 7-2 Physician fee schedule–allowed charges by type of service, 2021



Note: Components may not sum to 100 percent due to rounding. This chart shows "other procedures" and "treatments" as separate categories; previously published versions of this chart had combined them.

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

> In 2021, allowed charges for physician fee schedule services totaled $92.8 billion. "Allowed charges" includes both program spending and beneficiary cost sharing.

> In 2021, 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).

> The treatments category includes physical therapy, cancer treatments, and dialysis. The two procedure categories include various eye, cardiovascular, skin, and vascular procedures. The distinction between major procedures and other procedures is determined by the size of the payment rate for each procedure and whether it is typically furnished in an inpatient setting.

Chart 7-3 Total encounters per FFS beneficiary was higher in 2021 compared with 2016, and the mix of clinicians furnishing them changed

Specialty category	Encounters per beneficiary				Percent change in encounters per beneficiary		
					Average annual		Cumulative
	2016	2019	2020	2021	2016–2019	2019–2021	2016–2021
Total (all clinicians)	21.4	22.3	19.8	21.6	1.3%	–2.8%	1.0%
Primary care physicians	3.8	3.5	3.1	3.2	–2.6	–9.3	–16.1
Specialists	12.7	12.9	11.4	12.3	0.4	–4.7	–3.7
APRNs/PAs	1.8	2.5	2.4	2.7	11.0	11.0	51.7
Other practitioners	3.1	3.4	2.9	3.5	3.4	1.1	11.9

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 the 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 2022 annual report of the Boards of Trustees of the Medicare trust funds.

> An "encounter" is a measure of beneficiary interaction 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 2016 to 2019 period, the overall number of encounters per beneficiary fell 2.8 percent from 2019 to 2021 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 2016 and 2019, but fell by 4.7 percent from 2019 to 2021.

> Encounters with APRNs and PAs grew rapidly from 2016 to 2021 (51.7 percent), and encounters with primary care physicians declined substantially (–16.1 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, 2016–2021

	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
2016	142	446	198	162	948	2.7	8.6	3.8	3.1	18.2
2017	141	454	218	168	981	2.6	8.5	4.1	3.1	18.4
2018	140	461	237	174	1,012	2.6	8.4	4.3	3.2	18.5
2019	139	467	258	180	1,045	2.5	8.3	4.6	3.2	18.7
2020	136	467	268	172	1,044	2.4	8.1	4.7	3.0	18.2
2021	135	471	286	180	1,073	2.3	8.1	4.9	3.1	18.4

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 2022 annual report of the Boards of Trustees of the Medicare trust funds.

> From 2016 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, but rebounded in 2021.

> The total number of clinicians per 1,000 beneficiaries increased from 18.2 to 18.7 over the 2016 to 2019 period before falling to 18.2 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. The fact that the ratio grew to 18.4 in 2021 suggests that the reduction in 2020 was temporary.

> Over the 2016 to 2021 period, the number of primary care physicians billing the fee schedule slowly declined—yielding a net loss of about 7,000 primary care physicians by 2021. Over the same five-year period, the number of APRNs and PAs billing the fee schedule grew rapidly from about 198,000 to 286,000. 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 In MedPAC's 2022 survey, Medicare beneficiaries were less likely to have to wait for appointments than privately insured individuals

Survey question	Medicare (ages 65 and older)	Private insurance (ages 50–64)
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	55%*	40%*
Sometimes	32*	40*
Usually	8*	12*
Always	4*	8*
For illness or injury		
Never	67*	58*
Sometimes	26	29
Usually	4*	8*
Always	3*	5*

Note: Components may not sum to 100 percent because of rounding and because the table does not show the share of respondents who said they didn't know or who refused to answer. Sample sizes for each group (Medicare and private insurance) are 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. Survey results from 2022 may not be directly comparable to prior years' survey results due to changes in our survey methodology in 2022.
*Statistically significant difference between the Medicare and private insurance groups in the given year (at a 95 percent confidence level).

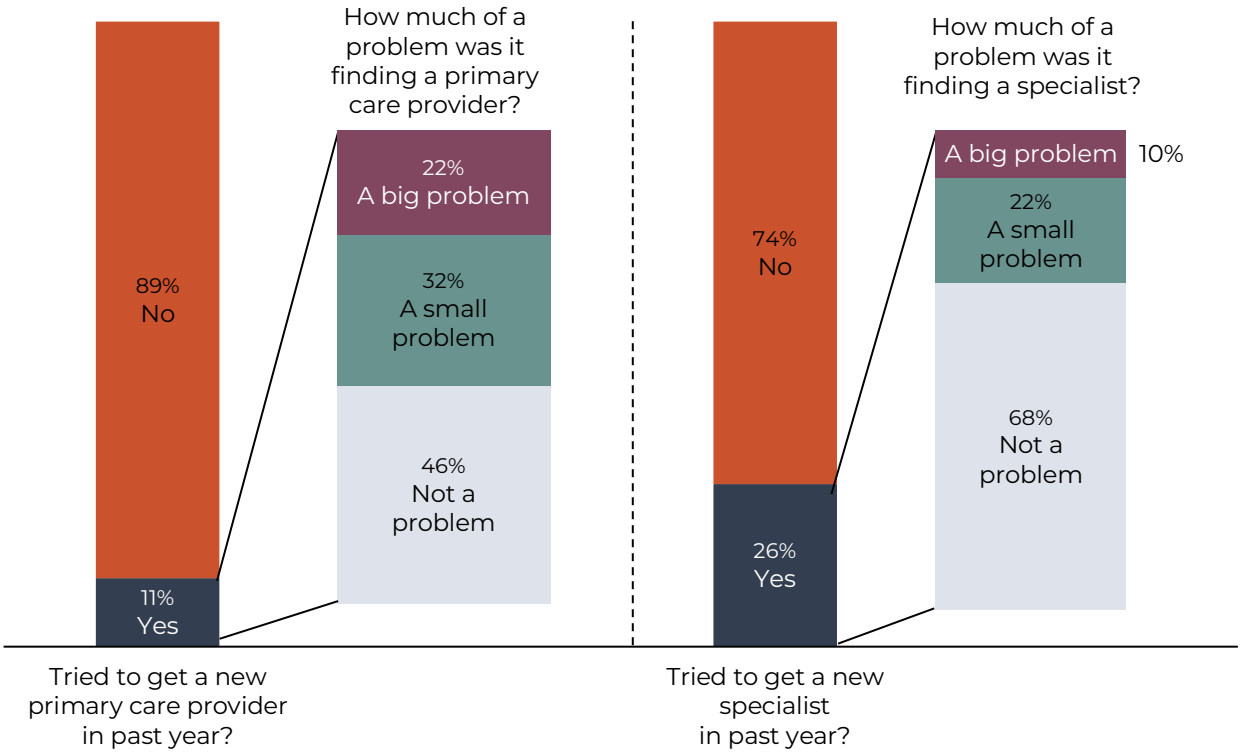
Source: MedPAC's annual access-to-care survey conducted in August 2022.

> Most Medicare beneficiaries have one or more doctor appointments in a given year. Their ability to schedule timely appointments is one indicator of access to care that we examine in our annual survey.

> In 2022, our survey found that aged Medicare beneficiaries were much less likely than privately insured individuals to report having to wait longer than they wanted to get a doctor's appointment. Slightly more than half of aged Medicare beneficiaries reported never waiting longer than they wanted to for a routine appointment, compared with 40 percent of individuals with private insurance.

> Both Medicare beneficiaries and privately insured individuals reported experiencing more waits for routine care appointments than for illness or injury appointments.

Chart 7-6 Medicare beneficiaries had more problems finding a new primary care provider than a new specialist, 2022



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 who refused to answer. Overall sample size for Medicare beneficiaries was approximately 4,000. Survey includes beneficiaries enrolled in fee-for-service Medicare or Medicare Advantage and excludes beneficiaries under the age of 65.

Source: MedPAC's annual access-to-care survey conducted in August 2022.

> In 2022, 11 percent of Medicare beneficiaries reported looking for a new primary care provider. The most common reason beneficiaries gave for looking (not shown) was that their primary care provider had retired or stopped practicing, which was reported by about half of the beneficiaries who were looking (equivalent to 5 percent of all Medicare beneficiaries); about a third of beneficiaries who looked for a new primary care provider did so because they wanted to change providers (equivalent to 3 percent of all Medicare beneficiaries).

> In 2022, 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 11 percent of Medicare beneficiaries who looked for a new primary care provider, 22 percent reported a "big problem" finding a new one, and another 32 percent reported a "small problem" finding a new one. Although this finding means that only 6 percent of all Medicare beneficiaries 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 individuals (data not shown).

Chart 7-7 Comparable shares of White, Black, and Hispanic Medicare beneficiaries experienced waits for appointments, 2022

	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	56%[a]	57%	54%[a]	39%[a]	48%	37%[a]
Sometimes	32[a]	33	31	39[a]	42	43
Usually	8[a]	6	8	13[ab]	6[b]	8
Always	3[a]	4	7	9[a]	4[b]	12[b]
For illness or injury						
Never	68[a]	73	63	58[a]	64	57
Sometimes	26	21	27	29	29	28
Usually	4[a]	4	7	8[a]	5	9
Always	2[a]	2	3	5[a]	2	5

Note: Components may not sum to 100 percent because of rounding and because the table does not show the share of respondents who said they didn't know or who refused to answer. "White" refers to non-Hispanic White respondents. "Black" refers to non-Hispanic Black respondents. "Hispanic" refers to Hispanic respondents of any race. The small sample 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 2022. 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's annual access-to-care survey conducted in August 2022.

> In 2022, the shares of White, Black, and Hispanic Medicare beneficiaries who reported ever having to wait longer than they wanted to get a doctor's appointment were not statistically significantly different from each other. The same was true for privately insured individuals. (The share who "ever" had to wait longer than they wanted for an appointment is the sum of the shares who reported "sometimes," "usually," or "always" waiting longer that they wanted.)

> There were also no statistically significant differences in the shares of White, Black, and Hispanic Medicare beneficiaries who had a primary care provider, tried to get a new primary care provider or a new specialist in the past year, reported forgoing care in the past year, or were satisfied with the quality of their care (not shown). This was also true for the privately insured (not shown).

Chart 7-8 Telehealth experiences reported by Medicare beneficiaries and privately insured individuals in MedPAC's annual survey, 2022

Survey question	Medicare (ages 65 and older)	Private insurance (ages 50–64)
Had a telehealth visit: "In the past 12 months, have you had a [video/telephone] visit with any type of health care provider?"		
Yes (any type of telehealth visit)	35%	37%
Video visit	19*	28*
Telephone visit (audio only)	25*	21*
Reason for visit: Among those who had a telehealth visit, "Why did you have a [video/telephone] visit?"		
Video visit(s)		
COVID-19 pandemic	64	60
Telephone visit(s)		
COVID-19 pandemic	47	48
Satisfaction with telehealth: Among those who had a telehealth visit, "How satisfied were you with the [video/telephone] visit(s) you had?"		
Video visit(s)		
Satisfied (net)	92	89
Very satisfied	54	50
Somewhat satisfied	38	39
Dissatisfied (net)	8	11
Somewhat dissatisfied	6	7
Very dissatisfied	2	4
Telephone visit(s)		
Satisfied (net)	92*	87*
Very satisfied	58	52
Somewhat satisfied	34	35
Dissatisfied (net)	8*	13*
Somewhat dissatisfied	6	9
Very dissatisfied	1*	4*
Interest in continuing to use telehealth: Among those who had a telehealth visit, "Would you be interested in continuing to use telehealth visits to see health care providers after the COVID-19 pandemic ends?"		
Yes (net)	42*	55*
(Share overall)	14*	20*
Interested in video visits	47*	56*
(Share overall)	9*	16*
Interest in telephone visits	38*	47*
(Share overall)	9	10

Note: Components may not sum to 100 percent due to rounding and because infrequently selected response options are not shown. "Share overall" refers to the share of all respondents with this insurance. Survey results from 2022 may not be directly comparable to prior years' survey results due to changes in our survey methodology in 2022. *Statistically significant difference between the Medicare and private insurance groups in the given year (at a 95 percent confidence level).

Source: MedPAC's annual access-to-care surveys conducted in August 2022.

(Continued next page)

Chart 7-8 Telehealth experiences reported by Medicare beneficiaries and privately insured individuals in MedPAC's annual survey, 2022 (continued)

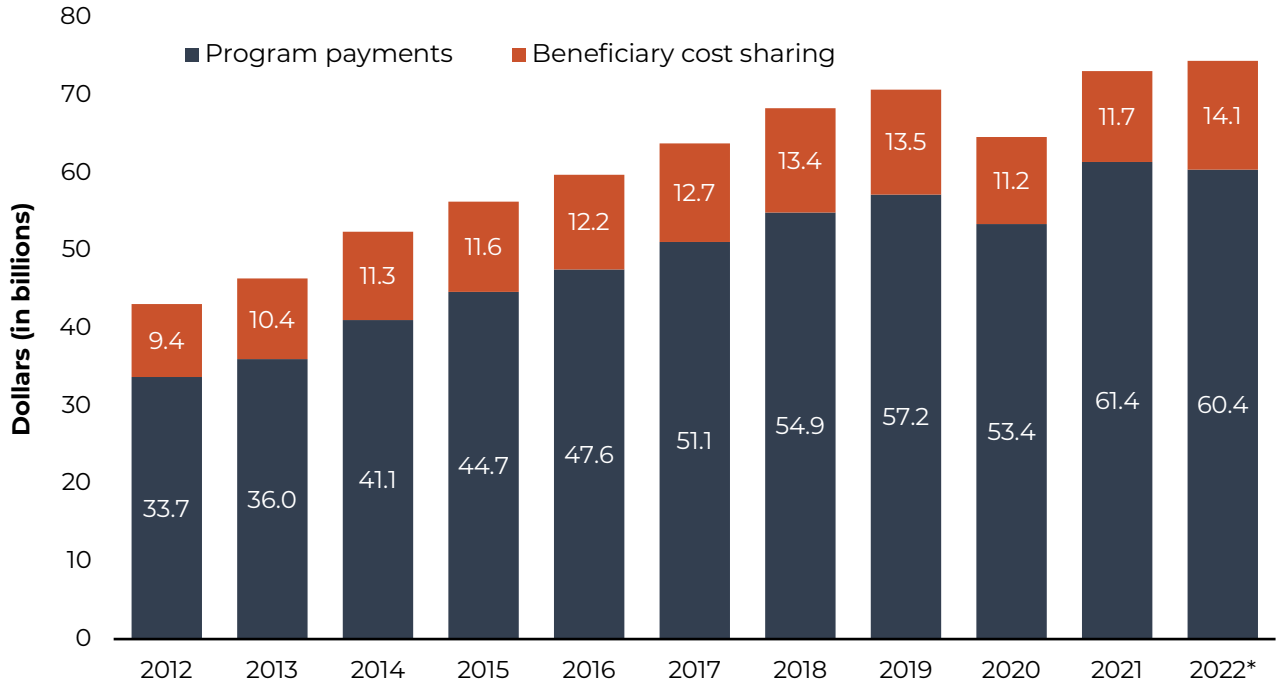
> In 2022, a little over a third of Medicare beneficiaries and privately insured people reported having had a telehealth visit in the past year. Medicare beneficiaries were somewhat more likely to have had an audio-only telephone visit than a video visit, while privately insured people were slightly more likely to have had a video visit than a telephone visit.

> About 90 percent of telehealth users report being satisfied with their telehealth visits.

> In 2022, among Medicare beneficiaries who reported having had a telehealth visit in the past year, 42 percent were interested in continuing to use telehealth after the COVID-19 pandemic ended (equivalent to 14 percent of all beneficiaries). Privately insured people were more interested in continuing to use telehealth, with 55 percent of telehealth users wanting to continue using it after the pandemic (equivalent to 20 percent of all privately insured people).

> In analyses of survey responses from Medicare beneficiary subgroups (not shown), video visits were more commonly used by beneficiaries who resided in urban areas, were Black, had higher household incomes (of at least $50,000), and were younger (ages 65 to 75, as opposed to 75 or over). In contrast, audio-only telephone visits were used at more comparable rates across beneficiary subgroups.

Chart 7-9 Spending on hospital outpatient services covered under the outpatient PPS, 2012–2022



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 $74.5 billion in 2022 ($60.4 billion in program spending, $14.1 billion in beneficiary copayments). We estimate that the outpatient PPS accounted for about 6.5 percent of total Medicare program spending in 2022 (data not shown).

> From calendar year 2012 to 2022, overall spending by Medicare and beneficiaries on hospital outpatient services covered under the outpatient PPS increased by 73 percent, an average of 5.6 percent per year. The Office of the Actuary projects continued growth in total spending, averaging 8.9 percent per year from 2022 to 2024 (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 19 percent in 2022 (data not shown).

Chart 7-10 Most hospitals provide outpatient services

Year	Acute care hospitals	Share offering:		
		Outpatient services	Outpatient surgery	Emergency services
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
2022	3,181	95	92	90

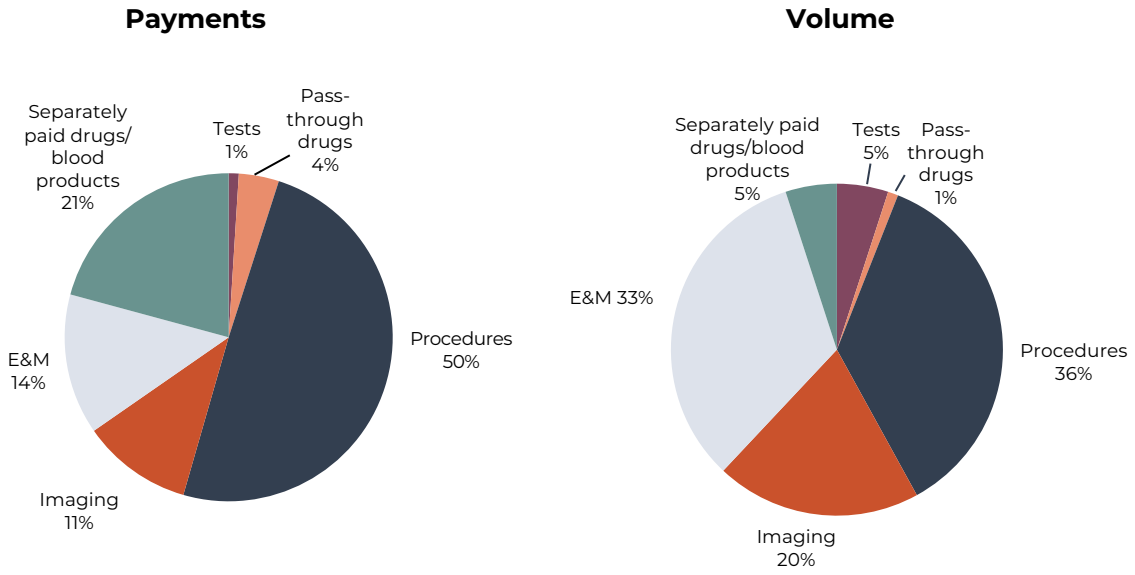
Note: N/A (not applicable). We list emergency services for 2010 as "N/A" because the data source we used for this chart changed the variable for identifying hospitals' provision of emergency services. This change in variable definition makes it appear that the share of hospitals providing emergency services 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 3,518 in 2008 (data not shown) to 3,181 in 2022.

> The share of hospitals providing outpatient services remained stable, and the share offering outpatient surgery steadily increased from 2010 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, 2021



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 "Payments" figure do not sum to 100 percent due to rounding.

Source: MedPAC analysis of standard analytic file of outpatient claims for 2021.

> 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 2021, procedures accounted for 50 percent of payments but only 36 percent of volume.

> Procedures (e.g., endoscopies, surgeries, and skin and musculoskeletal procedures) accounted for the greatest share of payments for services (50 percent) in 2021, followed by separately paid drugs and blood products (21 percent), E&M services (14 percent), and imaging services (11 percent).

Chart 7-12 Hospital outpatient services with the highest Medicare expenditures, 2021

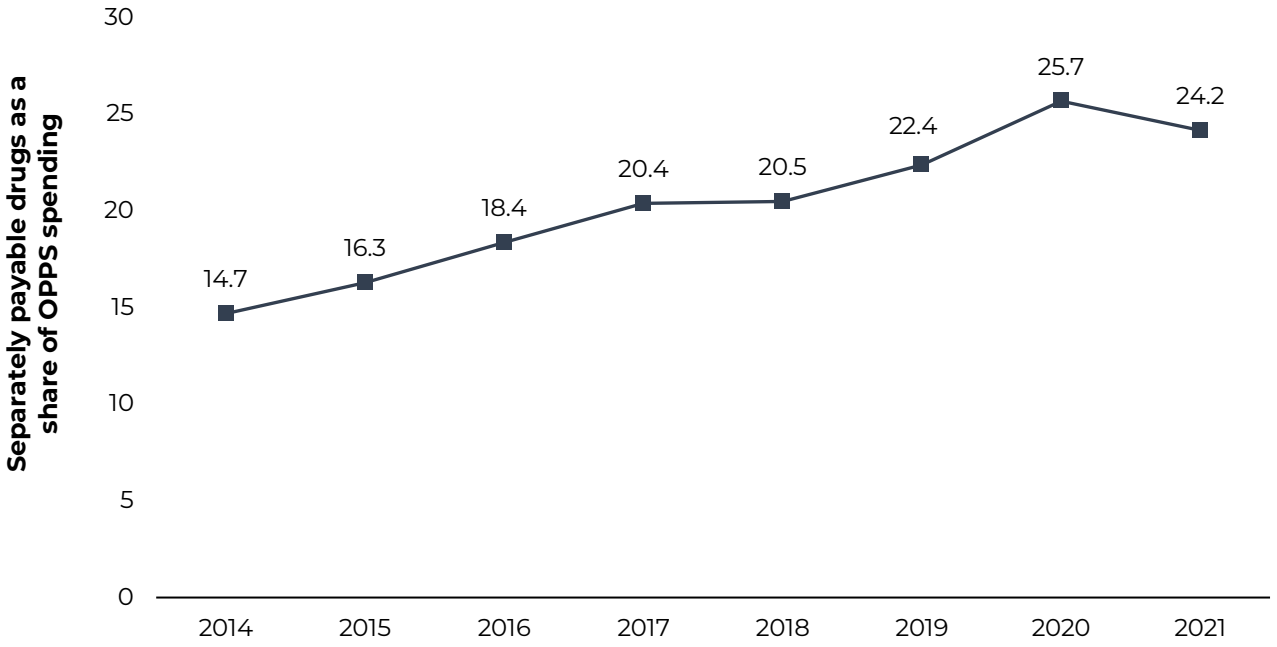
APC title	Share of Medicare expenditures	Volume (thousands)	Payment rate
Level 5 musculoskeletal procedures	7%	389	$12,315
All emergency visits	5	9,632	353
Clinic visits	4	27,835	119
Comprehensive observation services	3	969	2,283
Level 3 electrophysiologic procedures	3	82	21,464
Level 3 endovascular procedures	2	130	10,043
Level 4 musculoskeletal procedures	2	194	6,265
Level 3 drug administration	2	5,460	204
Level 2 ICD and similar procedures	2	32	32,839
Level 3 radiation therapy	1	1,807	543
Level 4 drug administration	1	2,819	311
Level 1 laparoscopy and related procedures	1	173	5,060
Level 1 endovascular procedures	1	298	2,899
Level 4 imaging without contrast	1	1,778	483
Level 2 imaging with contrast	1	2,309	368
Level 2 lower GI procedures	1	877	1,037
Level 2 imaging without contrast	1	7,733	109
Level 3 nuclear medicine and related services	1	619	1,306
Level 4 endovascular procedures	1	50	16,064
Level 3 pacemaker and similar procedures	1	72	10,400
Level 1 intraocular procedures	1	343	2,079
Level 3 imaging without contrast	1	3,000	2,30
Level 5 urology and related procedures	1	150	4,413
Level 2 laparoscopy and related procedures	1	76	8,904
Level 4 nuclear medicine and related services	1	422	1,480
Level 3 vascular procedures	1	214	2,862
Level 1 upper GI procedures	1	821	810
Level 1 imaging without contrast	1	7,072	81
Total	51		
Average for all APC		691	$409

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 expenditures (51 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 2021.

> 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, 2014–2021



Note: OPPS (outpatient prospective payment system). Separately payable drugs include both pass-through drugs and separately paid non-pass-through drugs.

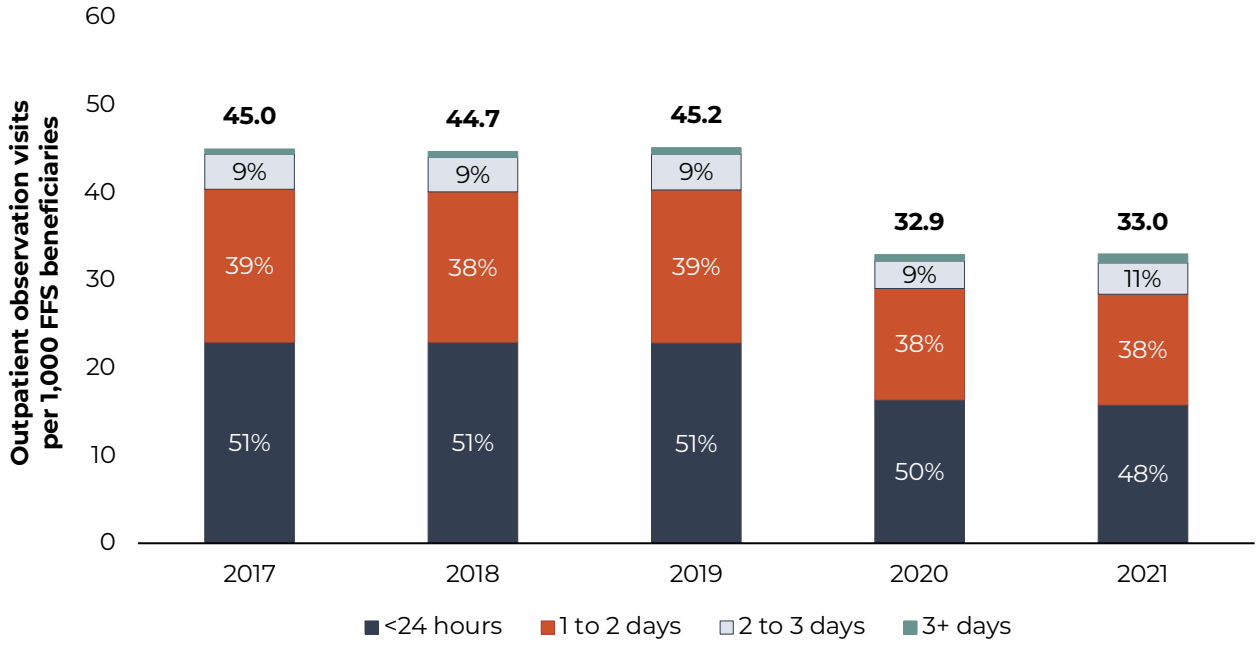
Source: MedPAC analysis of hospital outpatient standard analytic claims files from 2014 through 2020.

> 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 relatively expensive 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 24.2 percent in 2021. From 2020 to 2021, the share of OPPS spending attributable to separately payable drugs dropped from 25.7 percent to 24.2 percent. The relatively high percentage in 2020 was largely driven by a substantial 10 percent decrease in OPPS spending coupled with a small increase in spending on separately payable drugs. In 2021, spending on separately payable drugs rose by 5.2 percent, but OPPS spending increased by 11 percent, largely due to significant spending on the administration of coronavirus vaccines and coronavirus testing services.

> 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 FFS outpatient observation visits per capita remained at a relatively low level in 2021



Note: FFS (fee-for-service). Observation visits are separately payable visits with a length of stay of at least eight hours. Data for outpatient observation visits include short-term acute care hospitals in the U.S. (exclusive of territories) paid under the inpatient prospective payment system or under the Maryland state waiver. "Outpatient observation visits per capita" refers to observation visits that did not result in an inpatient admission per Medicare FFS Part B beneficiary. Years are calendar years. Components may not sum to 100 percent due to rounding and component values that are not shown.

Source: MedPAC analysis of outpatient standard analytical file data from CMS.

> Hospitals sometimes use observation care to determine whether a patient should be hospitalized for inpatient care, transferred to an alternative treatment setting, or sent home.

> The number of Medicare FFS outpatient observation visits per capita remained relatively steady from 2017 to 2019, at about 45 visits per 1,000 beneficiaries. The distribution of observation visits by length of stay also remained steady, with about half longer than 24 hours, including 10 percent that spanned more than 2 days.

> In 2020, the number of Medicare FFS outpatient observation visits per capita declined 30 percent to about 33 visits per 1,000 beneficiaries, though the distribution by length of stay remained similar to prior years. In 2021, the number was relatively unchanged. The drop in the number of observation visits in 2020 and 2021 reflects the COVID-19 public health emergency and is similar to the decline in non-COVID emergency room visits (data not shown).

Chart 7-15 Number of Medicare-certified ASCs increased by 11 percent, 2014–2020

	2015	2016	2017	2018	2019	2020	2021
Medicare payments (billions of dollars)	$4.1	$4.3	$4.6	$4.9	$5.2	$4.9	$5.7
New centers (during year)	172	172	218	236	245	184	254
Closed or merged centers (during year)	125	117	126	138	119	73	95
Net total number of centers (end of year)	5,434	5,489	5,581	5,679	5,805	5,916	6,075
Net percent growth in number of centers	0.9%	1.0%	1.7%	1.8%	2.2%	1.9%	2.7%
Share of all centers that are:							
For profit	95	95	95	95	95	95	95
Nonprofit	4	4	4	4	4	4	4
Government	1	1	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 2022 data book because CMS updated the Provider of Services file.

Source: MedPAC analysis of Provider of Services file from CMS 2022. Payment data are from MedPAC analysis of carrier standard analytic claims files.

> 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 7 percent per year, on average, from 2015 through 2021 (data not shown). From 2020 to 2021, total payments per FFS beneficiary rose 17.6 percent as FFS beneficiaries' use of ASC services strongly rebounded from the decline in use in 2020 due to the coronavirus pandemic (per beneficiary data not shown).

> The number of Medicare-certified ASCs grew at an average annual rate of 2.2 percent from 2015 through 2021. In this same period, an annual average of 212 new facilities entered the market, while an average of 113 closed or merged with other facilities.

Chart 7-16 Between 34 and 70 low-value services were provided per 100 FFS beneficiaries in 2021; Medicare spent between $2.2 billion and $6.5 billion on these services

Measure	Broader version of measure			Narrower version of 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	12.8	9.3%	$262	3.8	3.4%	$77
PSA screening at age > 75 years	9.5	6.5	88	5.5	4.5	50
Spinal injection for low back pain	6.8	3.6	1,381	2.9	1.8	588
PTH testing in early CKD	6.4	3.8	125	5.3	3.2	104
Colon cancer screening for older adults	6.1	5.8	408	0.2	0.2	2
T3 level testing for patients with hypothyroidism	4.7	2.8	30	4.7	2.8	30
Carotid artery disease screening in asymptomatic adults	4.5	4.2	254	3.6	3.3	201
Stress testing for stable coronary disease	3.6	3.5	1,084	0.4	0.4	126
Preoperative chest radiography	3.4	3.1	53	0.8	0.7	12
Head imaging for uncomplicated headache	3.1	2.9	221	1.9	1.8	135
Cervical cancer screening at age > 65 years	1.6	1.6	35	1.4	1.4	31
Homocysteine testing in cardiovascular disease	1.1	0.8	9	0.2	0.1	1
Head imaging for syncope	1.0	0.9	69	0.6	0.5	40
Preoperative echocardiography	1.0	0.9	81	0.3	0.3	25
Preoperative stress testing	0.6	0.6	177	0.2	0.2	53
CT for uncomplicated rhinosinusitis	0.5	0.5	38	0.2	0.2	18
Imaging for plantar fasciitis	0.5	0.4	10	0.3	0.2	4
BMD testing at frequent intervals	0.5	0.5	11	0.3	0.3	7
Vitamin D testing in absence of hypercalcemia or decreased kidney function	0.4	0.4	8	0.4	0.4	7
Screening for carotid artery disease for syncope	0.4	0.4	24	0.3	0.3	17
PCI/stenting for stable coronary disease	0.3	0.3	1,415	0.1	0.1	245
Cancer screening for patients with CKD on dialysis	0.3	0.2	9	0.1	0.05	1
Hypercoagulability testing after DVT	0.2	0.1	6	0.1	0.1	2
Vertebroplasty/kyphoplasty for osteoporotic vertebral fractures	0.2	0.1	319	0.2	0.1	312
Arthroscopic surgery for knee osteoarthritis	0.2	0.2	146	0.03	0.03	23
Preoperative PFT	0.1	0.1	2	0.1	0.1	0.8
IVC filter to prevent pulmonary embolism	0.1	0.1	18	0.1	0.1	18
Renal artery angioplasty/stenting	0.1	0.1	153	0.01	0.01	36
EEG for headache	0.04	0.04	3	0.02	0.02	2
Carotid endarterectomy for asymptomatic patients	0.4	0.04	108	0.02	0.02	44
Pulmonary artery catheterization in ICU	0.01	0.01	0.2	0.01	0.01	0.2
Total	70.1	35.8	6,545	33.8	21.9	2,214

(Chart continued next page)

Chart 7-16 Between 34 and 70 low-value services were provided per 100 FFS beneficiaries in 2021; Medicare spent between $2.2 billion and $6.5 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), PFT (pulmonary function test), PCI (percutaneous coronary intervention), 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. 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 2021. This method was developed by Schwartz et al. (2014. 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).

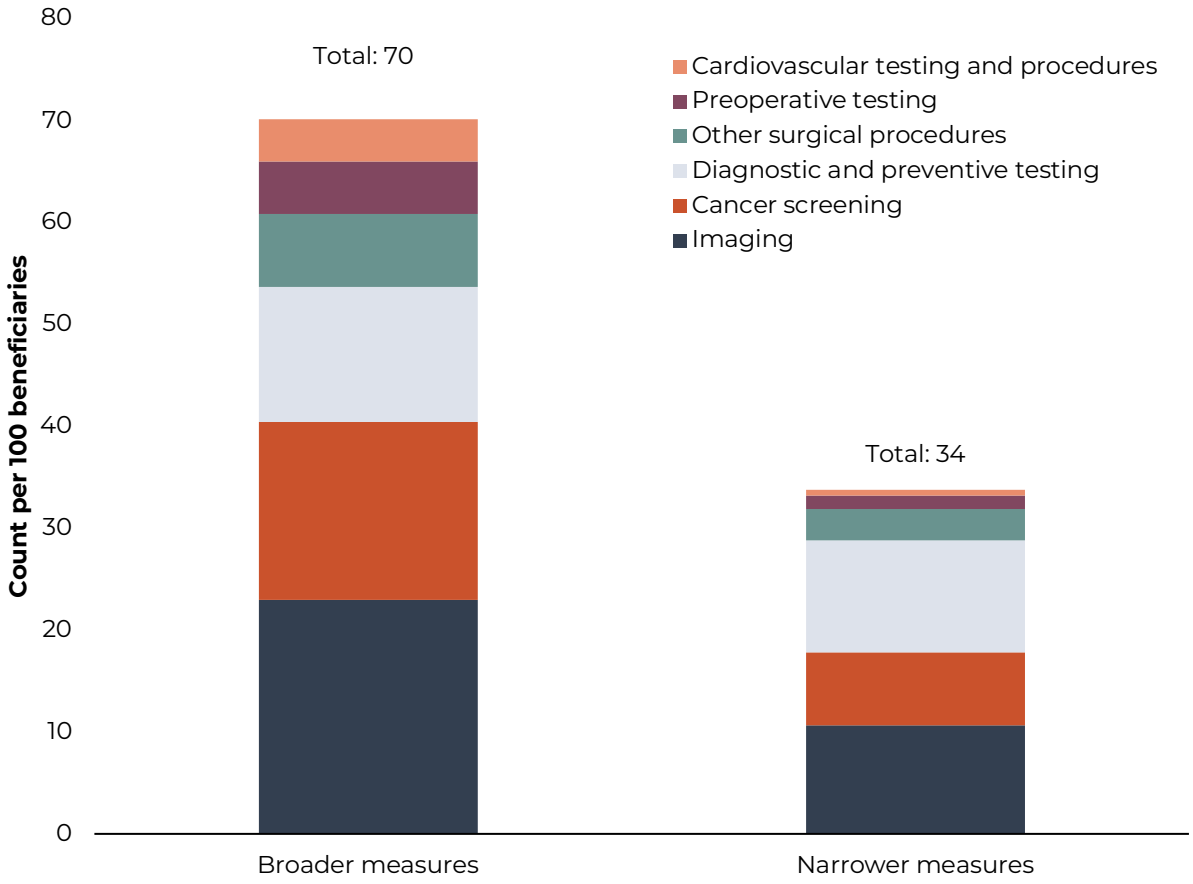
> Low-value care is the provision of a service that has little or no clinical benefit or care in which the risk of harm from the service outweighs its potential benefit.

> 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 2021. 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 70 instances of low-value care per 100 beneficiaries in 2021, with about 36 percent of beneficiaries receiving at least 1 low-value service that year. Medicare spending for these services was $6.5 billion. Based on the narrower versions of the measures, our analysis showed about 34 instances of low-value care per 100 beneficiaries, with almost 22 percent of beneficiaries receiving at least 1 low-value service. Medicare spending for these services totaled about $2.2 billion.

Chart 7-17 Imaging, cancer screening, and diagnostic and preventive testing accounted for most of the volume of low-value care in 2021



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

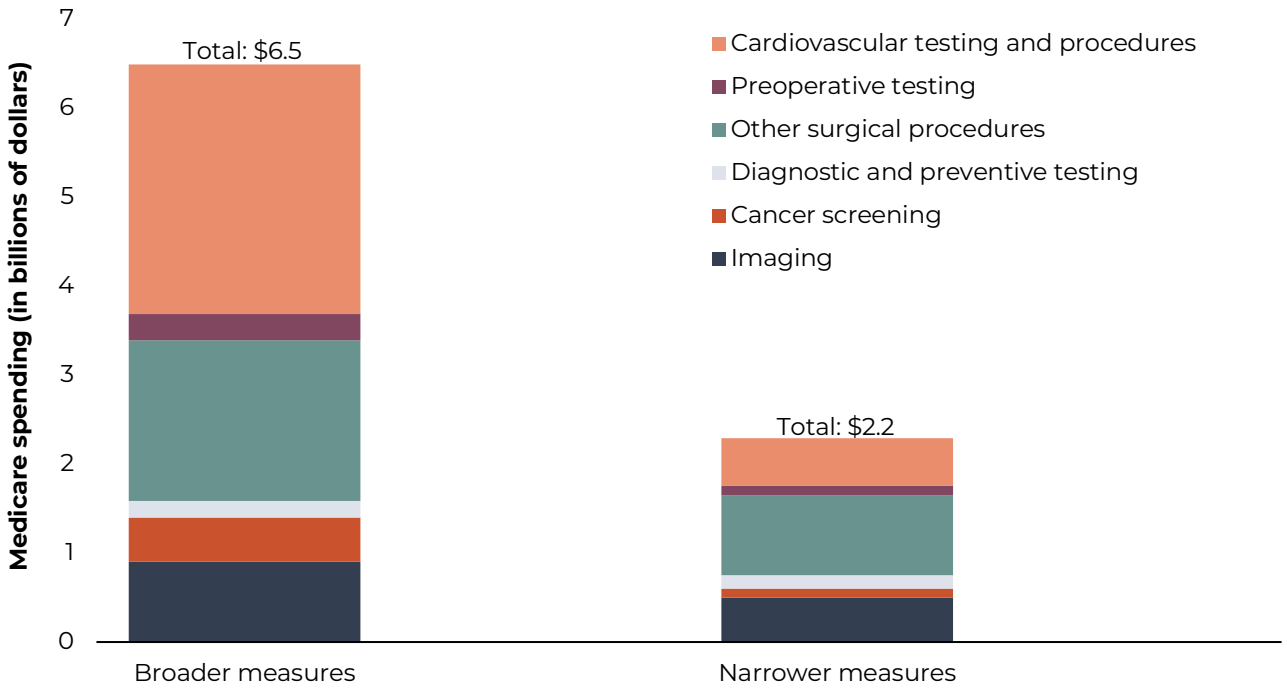
Source: MedPAC analysis of 100 percent of Medicare claims using measures developed by Schwartz and colleagues (Schwartz, A. L., M. E. Chernew, B. E. Landon, et al. 2015. Changes in low-value services in year 1 of the Medicare Pioneer Accountable Care Organization Program. *JAMA Internal Medicine* 175: 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 in Chart 7-16 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 7-18 Cardiovascular testing and procedures, other surgical procedures, and imaging accounted for most spending on low-value care in 2021



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 2021. 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 about 70 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.