

WHITE PAPER

FH[®] Healthcare Indicators and FH[®] Medical Price Index 2020

An Annual View of Place of Service Trends and Medical Pricing

A FAIR Health White Paper, March 2020



Summary

This is the third annual edition of FH[®] Healthcare Indicators and FH[®] Medical Price Index, two measures developed by FAIR Health to provide clarity in a rapidly changing healthcare environment. Drawing on the independent nonprofit's national database of billions of privately insured healthcare claims—the largest in the country—these two measures apply different approaches to illuminate different aspects of the national healthcare sector, including, among other factors, trends in the place of service and billed and allowed amounts for professional services.

FH Healthcare Indicators analyze trends involving the place of service, or setting (e.g., office, inpatient hospital, retail clinic, urgent care center, telehealth, ambulatory surgery center [ASC] and emergency room [ER]), for healthcare in recent years. Focusing on alternative places of service—retail clinics, urgent care centers, telehealth and ASCs—as well as ERs, FH Healthcare Indicators evaluate changes in utilization, geographic and demographic factors, diagnoses, procedures and costs. In the new edition, all time frames shift forward one year from the previous edition. For example, if a chart last year showed usage trends from 2012 to 2017, this year's chart shows 2013 to 2018. These are some of the key findings:

- Growth in utilization continued in recent years but at a slower pace across all the places of service studied for growth in utilization. For retail clinics and telehealth, there was growth in 2013-2018, but at a slower rate compared to 2012-2017. For urgent care centers, ASCs and ERs, there was growth in 2009-2018, but at a slower rate compared to 2008-2017.
- For three places of service, there was a decrease in utilization from 2017 to 2018: urgent care centers (11 percent), ASCs (12 percent) and ERs (15 percent). For two places of service, there was a rise in utilization in that period: retail clinics (10 percent) and telehealth (12 percent).
- For three places of service (urgent care centers, ASCs and ERs), rural and urban utilization both decreased from 2017 to 2018. But in two places of service, retail clinics and telehealth, that period saw an increase in utilization in urban areas accompanied by a decrease in rural areas.
- Nationally in 2018, as in 2017, the percentage of all medical claim lines attributed to retail clinics was less than 0.1 percent; the percentage attributed to urgent care centers was more than 1 percent and that attributed to ERs more than 2 percent.
- In 2018, as in 2016 and 2017, claim lines were submitted for women more than men in all adult age groups in the places of service in which FAIR Health studied gender-related patterns—retail clinics, urgent care centers, telehealth, ASCs and ERs.
- The most common diagnostic category in 2018 in retail clinics and urgent care centers was acute respiratory infections. But in telehealth and among individuals over 22 years of age in the ER, it was digestive system issues.
- In retail clinics and ERs, the 51-60 age group had the greatest share of claim lines in 2018. But in urgent care centers and telehealth, it was the 31-40 age group.
- In 2018, the median charge amount for a 30-minute new patient office visit (CPT^{®1} 99203) ranged from \$129 in a retail clinic to \$211 in an office to \$222 in an urgent care center.

FH Medical Price Index tracks the weighted average growth in median procedure charges and median imputed allowed amounts² in six procedure categories. This report does not consider facility fees. The categories are:

¹ CPT © 2019 American Medical Association (AMA). All rights reserved.

² Because payors' contracted network rates are proprietary and cannot be shared, FAIR Health employs an imputation methodology to determine benchmarks for allowed amounts. First, FAIR Health calculates the ratios of actual allowed amounts to charges for groups of procedure codes on a regional basis. The resulting ratios are applied to the actual charges for each specific procedure at the local (geozip) level to develop an "imputed" allowed amount for each claim line.

- Professional evaluation and management (E&M; excluding E&Ms performed in a hospital setting);
- Hospital E&M (excluding E&Ms performed in a professional setting, such as typical office visits);
- Medicine (excluding E&Ms);
- Surgery (procedures for which the physician would bill);
- Pathology and laboratory (including both technical and professional components, i.e., both equipment and professional services); and
- Radiology (including both technical and professional components).

May 2012 is the base month, to which values in later periods are compared; therefore, FH Medical Price Index establishes a consistent point of reference that makes it easy to identify and compare shifts.

In the first edition, FH Medical Price Index presented an overview from May 2012 to May 2017, which was extended in the second edition to November 2018. In the new edition, the indices are extended to November 2019. Findings include the following, all for the period November 2018 to November 2019:

- Of the six procedure categories, hospital E&Ms had the greatest percent increase in charge amount index, nine percent, and the second greatest percent increase in allowed amount index, seven percent.
- Surgery had the greatest percent increase in allowed amount index, nine percent, and the second greatest percent increase in charge amount index, seven percent.
- The radiology charge amount index decreased one percent, the only decrease in either charge amount or allowed amount indices.
- Pathology and laboratory, and radiology, had the lowest percent increases in allowed amount index, each one percent.
- The professional E&M charge amount and allowed amount indices increased five percent.
- The medicine charge amount index grew six percent and allowed amount index four percent.
- The pathology and laboratory charge amount index increased three percent.

Background

In a white paper in March 2018, FAIR Health launched two new measures of healthcare information: FH[®] Healthcare Indicators and FH[®] Medical Price Index.³ Designed to provide clarity in a rapidly changing healthcare environment, these two measures for deriving insights from data elicited a welcome public response; stakeholders expressed appreciation for being offered this “macro” view into the nation’s healthcare system. From the start, the measures were intended to be released annually to keep pace with change. Last year, FAIR Health released the second annual edition,⁴ and this is the third.

Since the first edition, the healthcare sector has continued to change and grow more complex. Healthcare stakeholders continue to need information that will enable them to discern fundamental trends and patterns, and to make decisions on that basis. FH Healthcare Indicators and FH Medical Price Index are intended to serve all such constituents, including insurers and companies that self-insure, third-party administrators, hospitals and health systems, physicians and other individual providers, pharmaceutical

³ FAIR Health, *FH[®] Healthcare Indicators and FH[®] Medical Price Index: A New View of Place of Service Trends and Medical Pricing*, A FAIR Health White Paper, March 2018, <https://s3.amazonaws.com/media2.fairhealth.org/whitepaper/asset/FH%20Medical%20Price%20Index%20and%20FH%20Healthcare%20Indicators--whitepaper.pdf>.

⁴ FAIR Health, *FH[®] Healthcare Indicators and FH[®] Medical Price Index 2019: An Annual View of Place of Service Trends and Medical Pricing*, A FAIR Health White Paper, April 2019, <https://s3.amazonaws.com/media2.fairhealth.org/whitepaper/asset/FH%20Healthcare%20Indicators%20and%20FH%20Medical%20Price%20Index%202019%20-%20A%20FAIR%20Health%20White%20Paper.pdf>.

and device manufacturers, federal and state government officials, legislators, policy makers, economists and academic researchers.

Both FH Healthcare Indicators and FH Medical Price Index use the same data source: FAIR Health's database of over 30 billion claim lines contributed by payors and administrators who insure or process claims for private insurance plans covering more than 150 million individuals. A national, independent nonprofit organization, FAIR Health uses this repository—the nation's largest collection of private healthcare claims data—in furtherance of its mission of bringing transparency and integrity to healthcare costs and health insurance information.

Like previous releases, this year's edition of FH Healthcare Indicators and FH Medical Price Index is intended to assist healthcare stakeholders in a variety of ways. For example, health systems can use the information in budgeting and considering affiliations or market expansion; insurers in designing plan benefits and provider networks, informing reimbursement policies and setting premiums; government agencies and policy makers in trying to frame public health campaigns and responses, and set courses to benefit the public good; investors in researching the healthcare sector; and economists and researchers in seeking to track and evaluate important trends.

Methodology

For this study, FAIR Health used its repository of private claims data, which includes data on commercially insured and Medicare Advantage (Medicare Part C) enrollees, but not that of uninsured individuals or those on Medicaid or on Medicare Parts A, B and D.⁵

FH Healthcare Indicators Methodology

To segregate FAIR Health claims data into venues of care, FAIR Health used standard Centers for Medicare & Medicaid Services (CMS) place of service codes to identify retail clinics (CMS place of service 17), urgent care centers (CMS place of service 20) and office (CMS place of service 11). Other methodologies were used to identify ERs (e.g., CMS place of service 23, bill type of 131 and/or an emergency department visit CPT code [CPTs 99281 through 99285]); telehealth (telehealth CPT codes such as CPT 99441 or telehealth modifiers such as GQ); and ASCs (bill type of 83* or CMS place of service 24).

The data were then aggregated by a variety of key fields, including state, urban/rural, diagnostic categories (e.g., urinary tract infection, ear infection, acute respiratory infection), year of service and patient demographics (age and gender), to identify trends and patterns in utilization and variation in cost. The data were evaluated with single and multiple variables to look for distinct trends and associations, which were then used to create graphical representations of the information.

In the graphical representations, the term “claim lines” refers to the individual procedures listed on insurance claims. A single claim for one patient may have multiple claim lines, with each line reflecting a separate procedure. To normalize the data and avoid fluctuations due to natural changes within plan data (e.g., the closing of a major employer and the loss of those members, or the addition of a major employer to a plan from which FAIR Health receives data, which would create a net influx of data from those members), FAIR Health calculates each data point as a percentage of the total number of medical claim lines for each year. When evaluating rural or urban data for a place of service, the denominator is all medical claim lines within that year and region. When evaluating total national data for a place of service,

⁵ It should be noted that FAIR Health also receives data for traditional Medicare Parts A, B and D under the Centers for Medicare & Medicaid Services Qualified Entity Program, but those data are not a source for this report.

the entirety of medical claim lines for that year is the denominator. Once this claim line percentage is established, FAIR Health creates two separate types of trend charts.

“Percent of claim lines” is the percentage of all normalized claim line percentages as described above associated with a given grouping (e.g., a place of service) in a given time period in a particular chart. For example, in figure 1, which shows claim lines with retail clinic usage by rural, urban and national settings from 2013 to 2018, each year’s data point for national usage is the percentage of all the claim lines in the national usage grouping from 2013 to 2018. If one were to add up all the data points for national usage from all the years in this period, they would total 100 percent.

Other graphs present “percent of all medical claim lines.” In this case, the number of claim lines for the place of service being evaluated in a particular location (state, rural, urban or national) in a particular year is presented as a percentage of all claim lines within the FAIR Health database that are designated as medical claim lines (not including dental or pharmacy claim lines) in that location in that year. For example, in figure 2, rural retail clinic claim lines in 2013 are shown as a percentage of all rural medical claim lines in that year.

FAIR Health Medical Price Index Methodology

FAIR Health used two of its benchmark products, FH[®] Medical and FH[®] Allowed Medical, to calculate, respectively, charge amounts and allowed amounts for FH Medical Price Index. For each procedure code, the benchmark products (modules containing cost data based on recent claims) include a median value, which is the dollar value used for all codes included in the indices. Sixteen releases of the benchmark products were used to establish the dollar value of the indices: May and November of each year from 2012 to 2019. The total frequency across the entire time period for each procedure code within the selected categories (professional E&M, hospital E&M, medicine, surgery, pathology and laboratory, and radiology) was used to select codes for inclusion or exclusion. Each procedure code that had a total combined frequency of one million or more occurrences in the 16 module releases was included in the indices. This allowed for natural inclusion of new codes and eventual exclusion of deleted codes in a gradual and controlled manner so as not to create erroneous fluctuations.

Once the list of codes to be included in the index was established, the median value (in dollars) for each code in each release was multiplied by the corresponding frequency for that code for the 16 releases, producing the release code median total. Then, all release code median totals in a category were summed to get a total dollar value for each release in that category (the release median total). That release median total was divided by the total frequency to generate a release average median. Each index was then created by using the following index formula: dividing each release average median for each month and year by the first release average median established (May 2012, the base):

$$\frac{\text{Release Weighted Average of Median}_{\text{MONTH YEAR}}}{\text{Release Weighted Average of Median}_{\text{BASE}}} = \text{Index Value}_{\text{MONTH YEAR}}$$

The table below provides a sample calculation of how an FH Medical Price Index value is derived.

Table. Calculation of FH Medical Price Index for professional E&M charge amounts over a sample of the period May 2012-November 2019

Release	Release Median Total	Total Frequency	Release Median Total/Total Frequency = Release Average Median	Index Formula	FH Medical Price Index Value
May 2012	\$280,020,108,863	2,013,522,941	\$139.07 (base)	$\left(\frac{\$139.07}{\$139.07}\right)$	1.00
Nov 2019	\$459,900,839,844	2,467,748,260	\$186.36	$\left(\frac{\$186.36}{\$139.07}\right)$	1.34

FH Healthcare Indicators

As in last year’s report, FAIR Health studied four alternative places of service—retail clinics, urgent care centers, telehealth and ASCs—and compared them to more traditional venues of care, offices and ERs. This year, the findings were brought up to date through 2018. Because venues of care are subject to varying state laws and regulations, changes in utilization may reflect greater liberalization or constraints associated with the relevant venue. For example, a 2017 study of three states (Pennsylvania, New Jersey and Maryland) with varying levels of scope of practice restraint found an association between relaxation of nurse practitioner practice regulations and growth of retail clinics, which are often staffed by nurse practitioners.⁶

⁶ J. Margo Brooks Carthon et al., “Growth in Retail-Based Clinics after Nurse Practitioner Scope of Practice Reform,” *Nursing Outlook* 65, no. 2 (March-April 2017): 195-201, <https://doi.org/10.1016/j.outlook.2016.11.001>.

Retail Clinic

Claim lines for retail clinics grew nationally 293 percent from 2013 to 2018 (figure 1), a slower pace of growth than that documented in last year's report (674 percent from 2012 to 2017), which in turn was slower than that reported the previous year (847 percent from 2011 to 2016).

Growth from 2013 to 2018 was higher in urban (299 percent) than rural areas (167 percent). From 2017 to 2018, total growth in the percentage share of retail clinic utilization was 10 percent and urban growth 9 percent; in rural areas, retail clinic usage declined 4 percent.

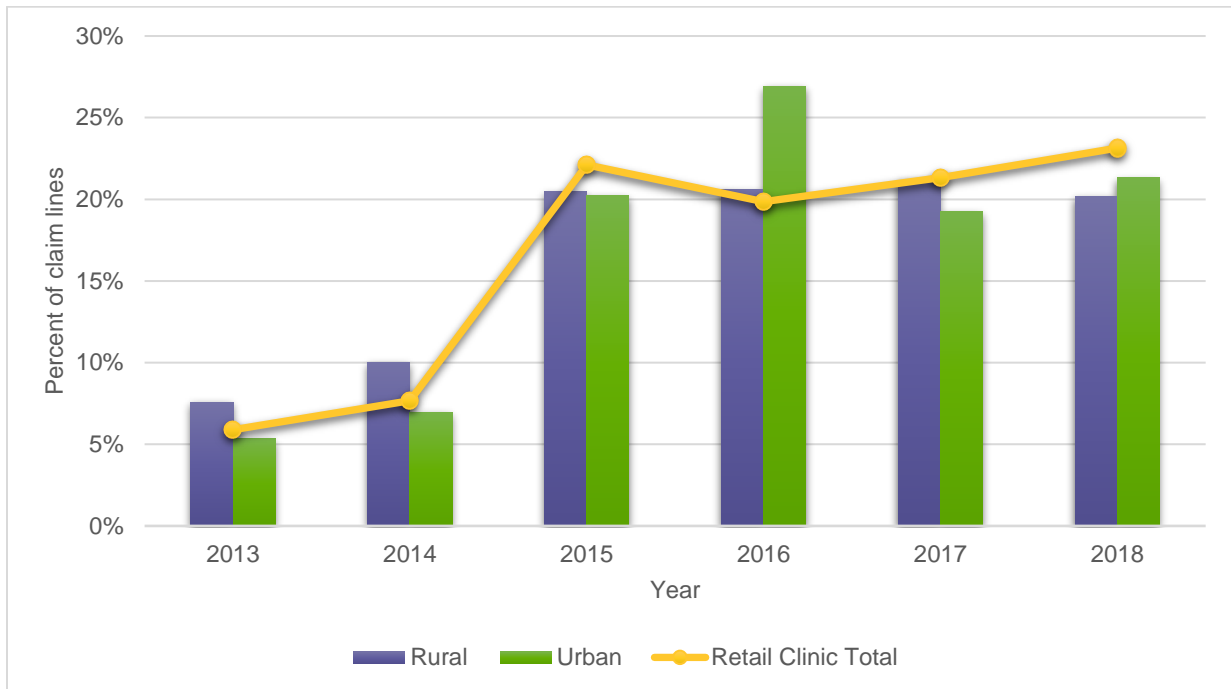


Figure 1. Percent of claim lines with retail clinic usage by rural, urban and national settings, 2013-2018

In figure 1 above, rural and urban retail clinic usage in 2013 is shown as a percentage of all rural and urban retail clinic usage, respectively, measured by claim lines, from 2013 to 2018. But in figure 2 below, rural and urban retail clinic usage in 2013 is shown as a percentage of all rural and urban medical claim lines, respectively, in that year.

In rural, urban and national settings from 2013 to 2018, the percentage of all medical claim lines attributed to retail clinics was less than 0.1 percent, just as it had been from 2012 to 2017. Use is increasing, however. In rural areas, retail clinics' percentage of all medical claim lines more than doubled, rising from 0.016 percent in 2013 to 0.043 percent in 2018. In urban areas, the percentage almost quadrupled, rising from 0.009 percent in 2013 to 0.035 percent in 2018. In the nation as a whole, the increase was from 0.009 percent to 0.036 percent.

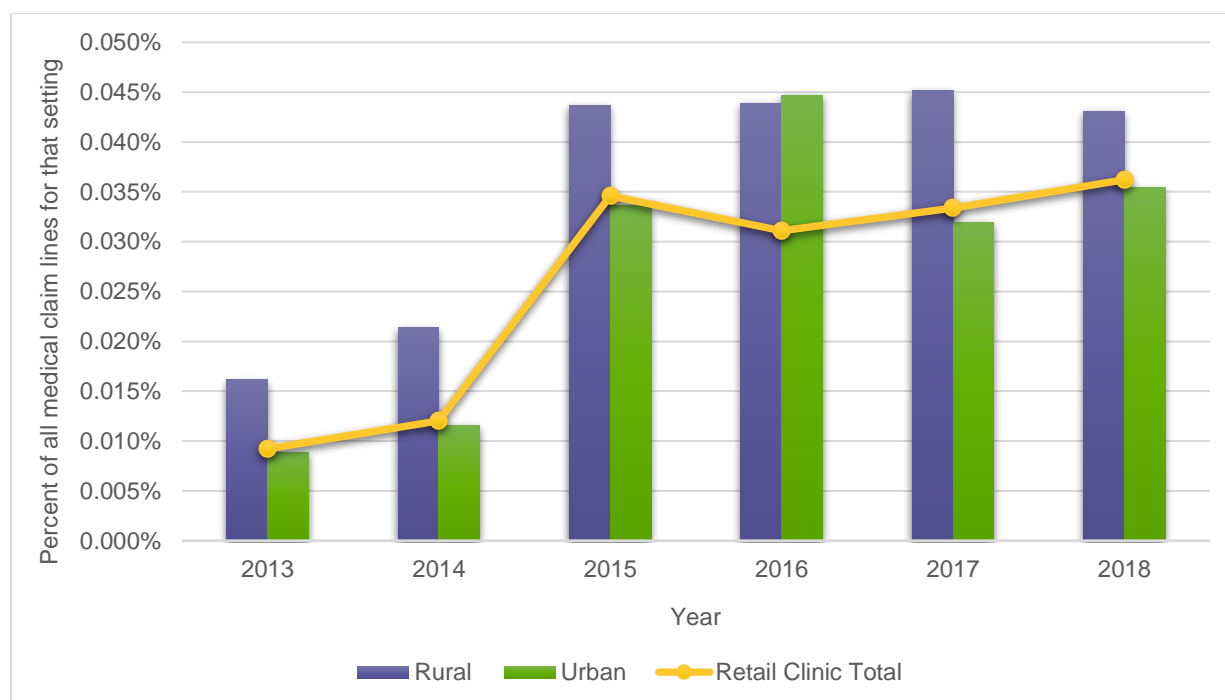


Figure 2. Claim lines with retail clinic usage as a percentage of all medical claim lines by rural, urban and national settings, 2013-2018

In the heat map below, states in which claim lines with retail clinic usage were a greater percentage of all medical claim lines than other states in 2018 are on the red end of the spectrum, while states with a lower percentage are on the green end (figure 3). As in 2017, Minnesota was the number one state for claim lines with retail clinic usage as a percentage of all medical claim lines by state. Also, as in 2017, New York and New Jersey remained in the top five, though they dropped from second and third place, respectively, to fourth and fifth place. Delaware and Montana entered the top five at second and third place, respectively. Nebraska and Alaska fell out of the top five.

The five states with the lowest retail clinic usage in 2018, in order from least to most, were Utah, Massachusetts, Nevada, Oklahoma and California. Three of those states—Utah, Nevada and California—were among the five with the lowest retail clinic usage in 2017 as well. Iowa and Colorado left the five with the lowest retail clinic usage from 2017 to 2018.

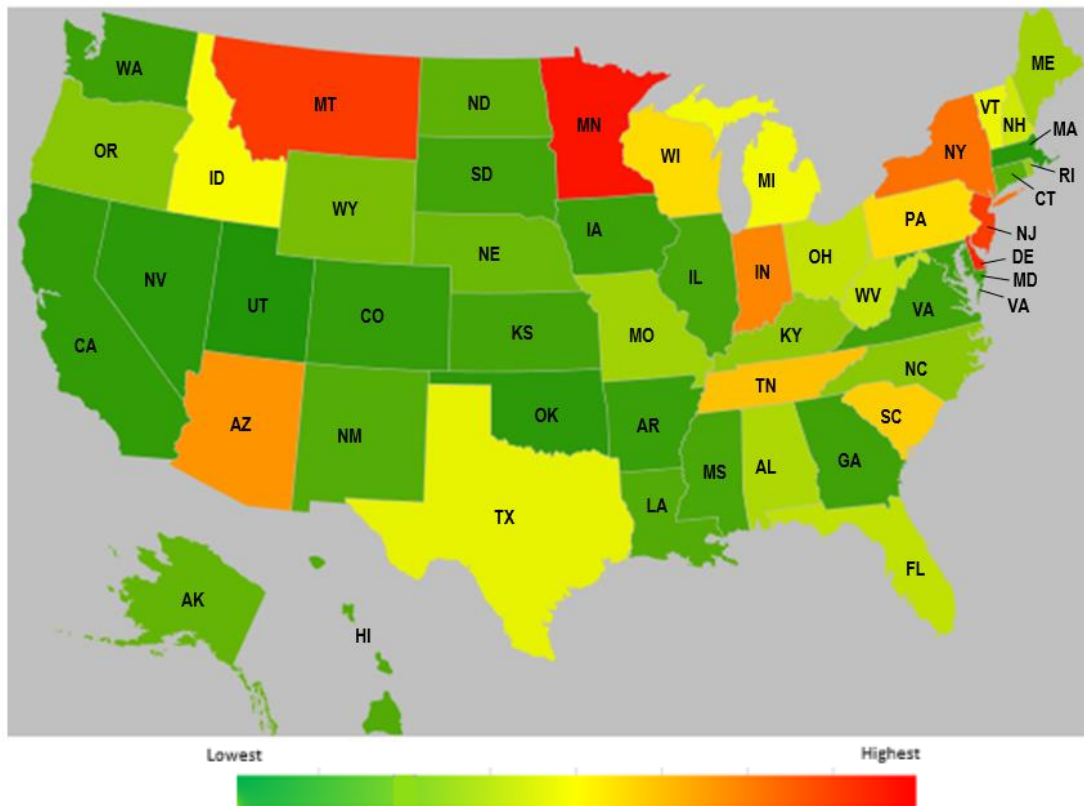


Figure 3. Percent of claim lines with retail clinic usage compared to all medical claim lines by state, 2018

The two age groups with the greatest share of claim lines with retail clinic usage remained the same in 2018 as in the previous two years (figure 4). Once again, individuals aged 51 to 60 were the age group for which the most retail clinic claim lines were submitted—23 percent of claim lines for retail clinics. Again, the second largest age group was individuals aged 61 to 70; claim lines for that age group constituted 20 percent of retail clinic claim lines.

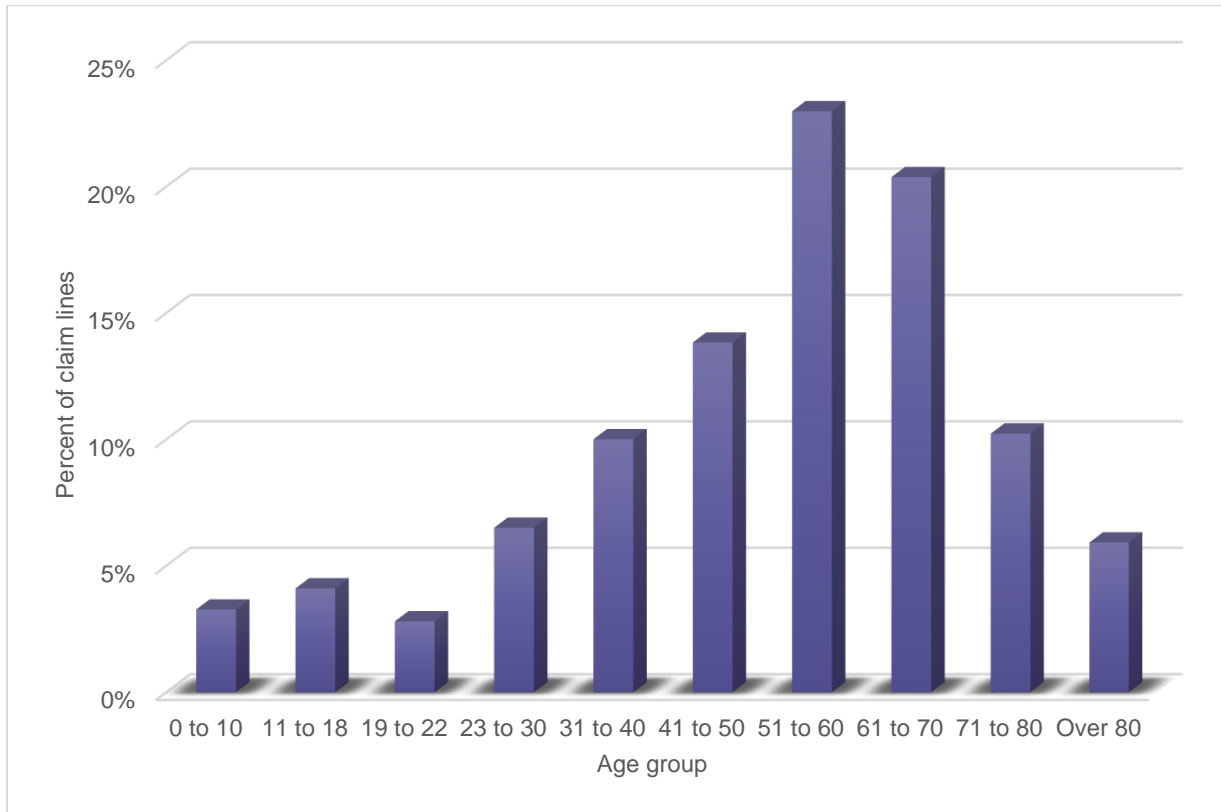


Figure 4. Percent of claim lines with retail clinic usage by age group, 2018

In 2018 as in the two previous years, claim lines were submitted for women more than men in all adult age groups in the places of service in which FAIR Health studied gender-related patterns—retail clinics, urgent care centers, telehealth, ASCs and ERs. As noted in past editions, this is consistent with the findings of other researchers that women are more likely than men to visit physicians⁷ and make use of healthcare services.⁸ In 2018, the largest gender differential was found in the age group 23 to 30, in which claim lines for women outnumbered those for men by 72 percent to 28 percent (figure 5). As in 2016 and 2017, the only age group in which claim lines for males outnumbered those for females was that of children aged 0 to 10.

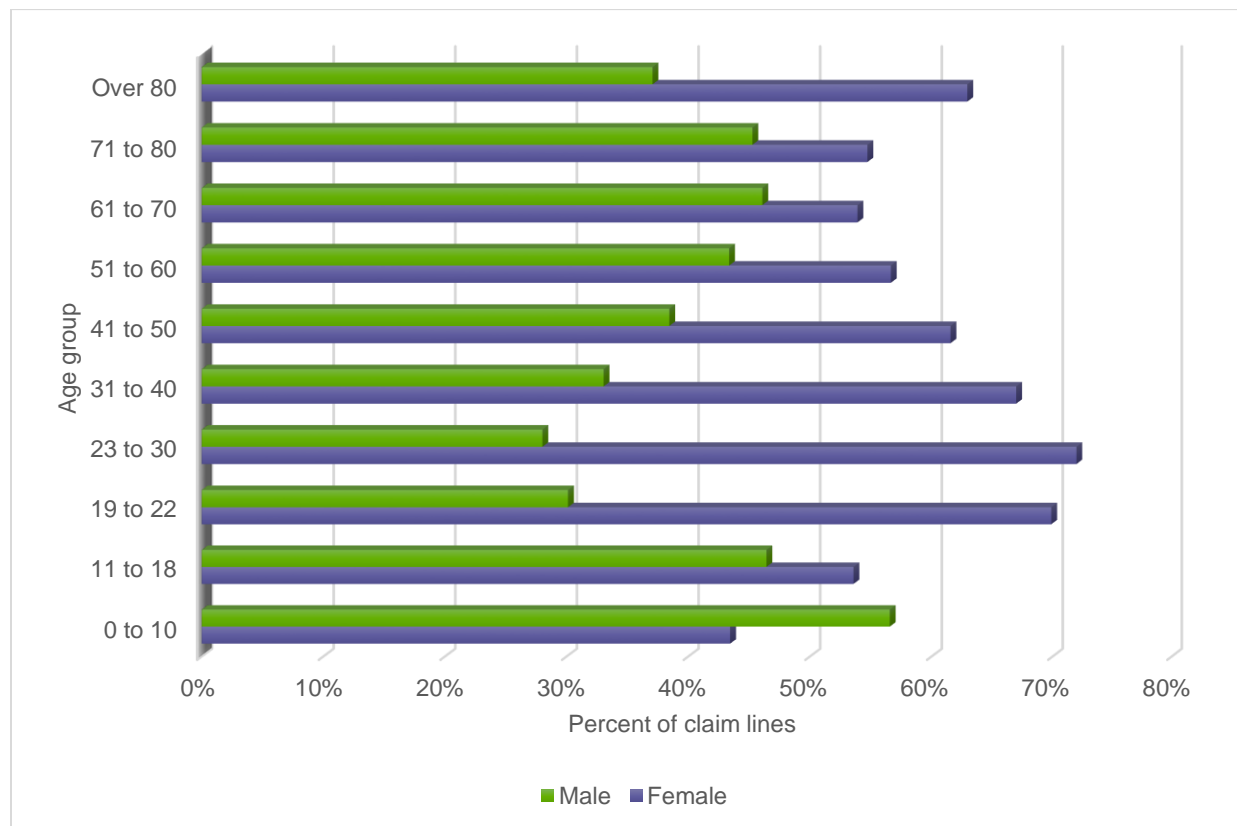


Figure 5. Percent of claim lines with retail clinic usage by age and gender, 2018

⁷ Jill J. Ashman, Esther Hing and Anjali Talwalkar, “Variation in Physician Office Visit Rates by Patient Characteristics and State, 2012,” NCHS Data Brief, no. 212 (Hyattsville, MD: National Center for Health Statistics, 2015), <https://www.cdc.gov/nchs/data/databriefs/db212.pdf>.

⁸ Klea D. Bertakis et al., “Gender Differences in the Utilization of Health Care Services,” *J Fam Pract* 49, no. 2 (2000):147-52, <https://www.ncbi.nlm.nih.gov/pubmed/10718692>.

As in 2016 and 2017, the most common diagnostic category in retail clinics in 2018 was acute respiratory infections, which accounted for 31 percent of retail clinic claim lines that year (figure 6). Its share of the distribution was smaller than the year before (34 percent). As in 2017, exposure to communicable diseases was the second most common diagnostic category in 2018, but its share of the distribution increased from 12 percent to 22 percent. Other common diagnostic categories in retail clinics in 2018 included persons encountering health services for examinations (six percent), ear infections (six percent) and urinary tract infections (five percent). Mental health disorders, a category that was in the top 10 in 2017 at three percent, was not in the top 10 in 2018.

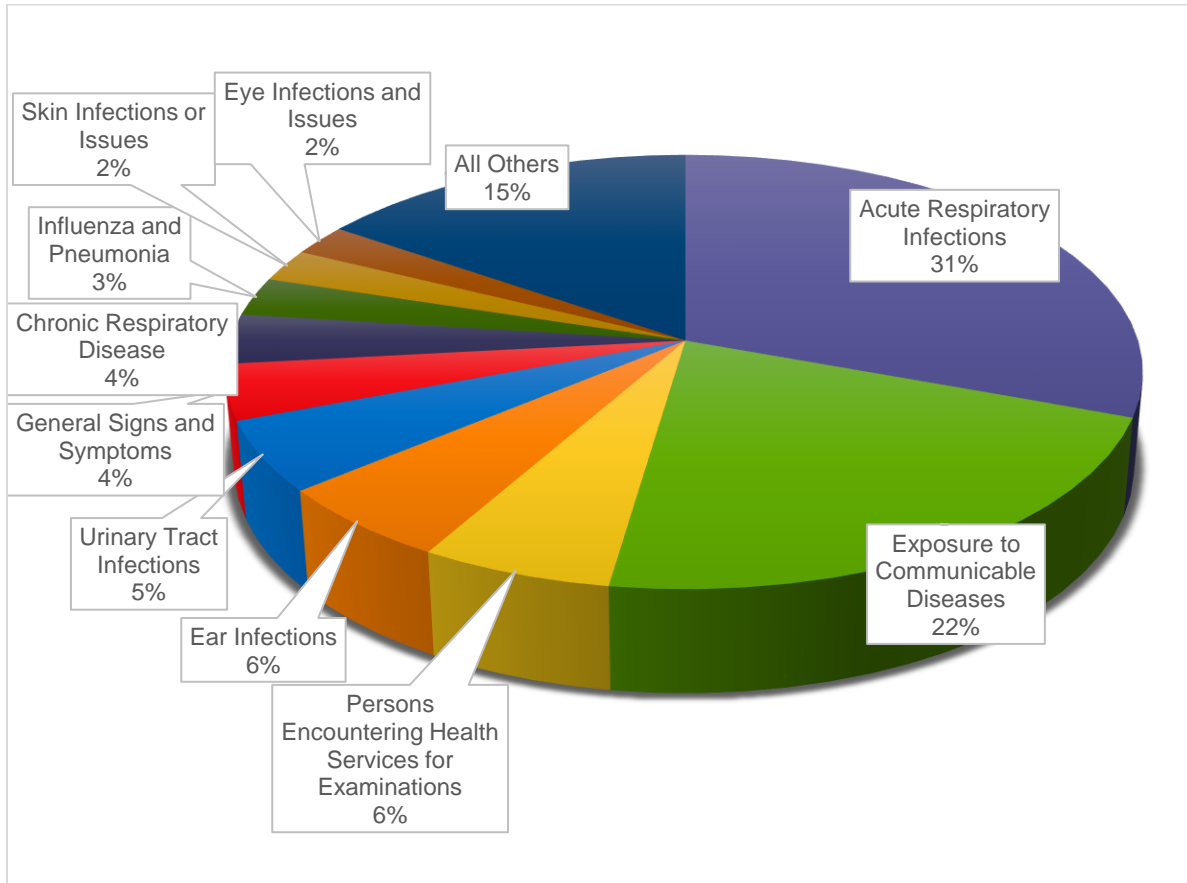


Figure 6. Distribution of claim lines with retail clinic usage by diagnostic category, 2018

As in 2016 and 2017, the type of procedure most commonly performed in retail clinics in 2018 was established patient office or other outpatient services (figure 7). Its share of the distribution of retail clinic claim lines fell, however, from 29 percent in 2017 to 25 percent in 2018. In second place in 2017 was new patient office or other outpatient services, constituting 13 percent of the distribution, but in 2018 it was in fourth place at 10 percent. These shifts could be due to higher volumes of testing for flu and strep (infectious agent antigen detection) or of vaccinations. Infectious agent antigen detection, vaccines and toxoids, and immunization administration for vaccines and toxoids all grew in their share of the distribution in 2018, reaching, respectively, 14 percent, 11 percent and 10 percent. By comparison, in 2017 they were at, respectively, 12 percent, 7 percent and 6 percent.

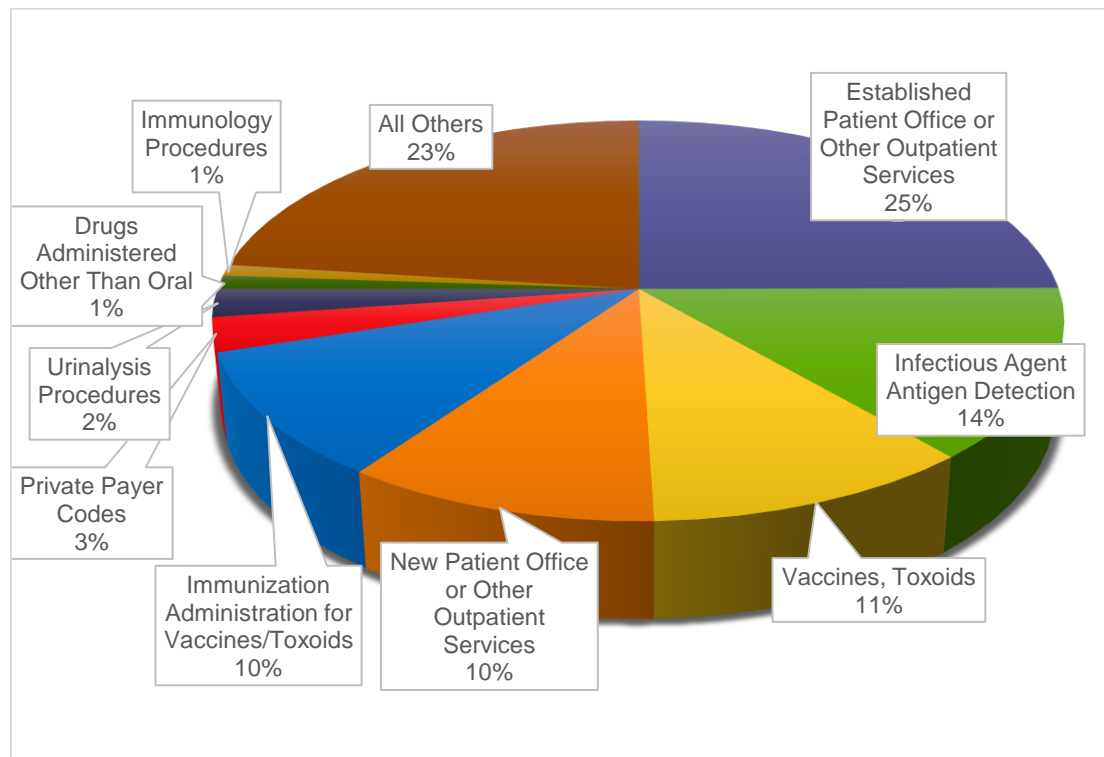
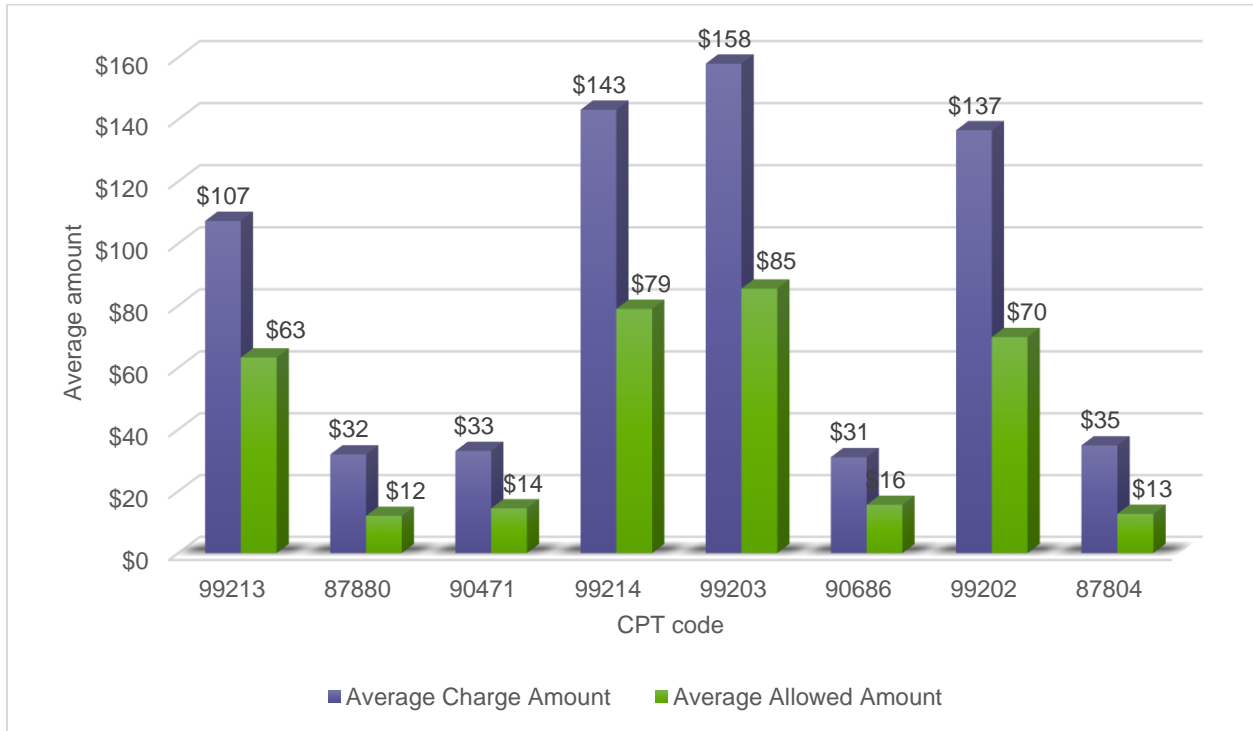


Figure 7. Distribution of claim lines with retail clinic usage by procedures, 2018

The average charges and allowed amounts for the most common procedures performed in retail clinics in 2018, as identified by CPT code, are shown in figure 8. Average charges for office visits ranged from \$107 (CPT 99213, a 15-minute established patient visit) to \$158 (CPT 99203, a 30-minute new patient visit), with corresponding allowed amounts ranging from \$63 (CPT 99213) to \$85 (CPT 99203). Streptococcus tests (CPT 87880), the second most common procedure being billed in retail clinics, had an average charge of \$32 and an average allowed amount of \$12. Average charges for vaccinations ranged from \$31 (CPT 90686, flu vaccine) to \$33 (CPT 90471, immunization administration), with corresponding allowed amounts of \$16 and \$14, respectively.



CPT Code	Description	CPT Code	Description
99213	Office outpatient visit – 15 minutes	99203	Office outpatient – new – 30 minutes
87880	Streptococcus test	90686	Influenza virus vaccine, quadrivalent
90471	Immunization administration	99202	Office outpatient – new – 20 minutes
99214	Office outpatient visit – 25 minutes	87804	Influenza test

Figure 8. Average charges and average allowed amounts for the most common procedures performed in retail clinics, 2018

Urgent Care

Claim lines for urgent care centers grew overall 523 percent from 2009 to 2018 (figure 9). This was a lower increase than that from 2008 to 2017 (1,434 percent), which itself was a lower increase than that from 2007 to 2016 (1,725 percent), as documented in the last two editions of this report. From 2017 to 2018, there was a decrease in utilization of 11 percent—the first decrease in utilization for this venue of care since 2007, the first year documented in editions of this report. The decrease in urgent care center usage from 2017 to 2018 was smaller in rural areas, which showed a decline of 9 percent compared to 11 percent in urban areas.

Growth in urgent care center usage from 2009 to 2018 was overall higher in rural (650 percent) than urban areas (514 percent), as it was from 2008 to 2017 and 2007 to 2016.

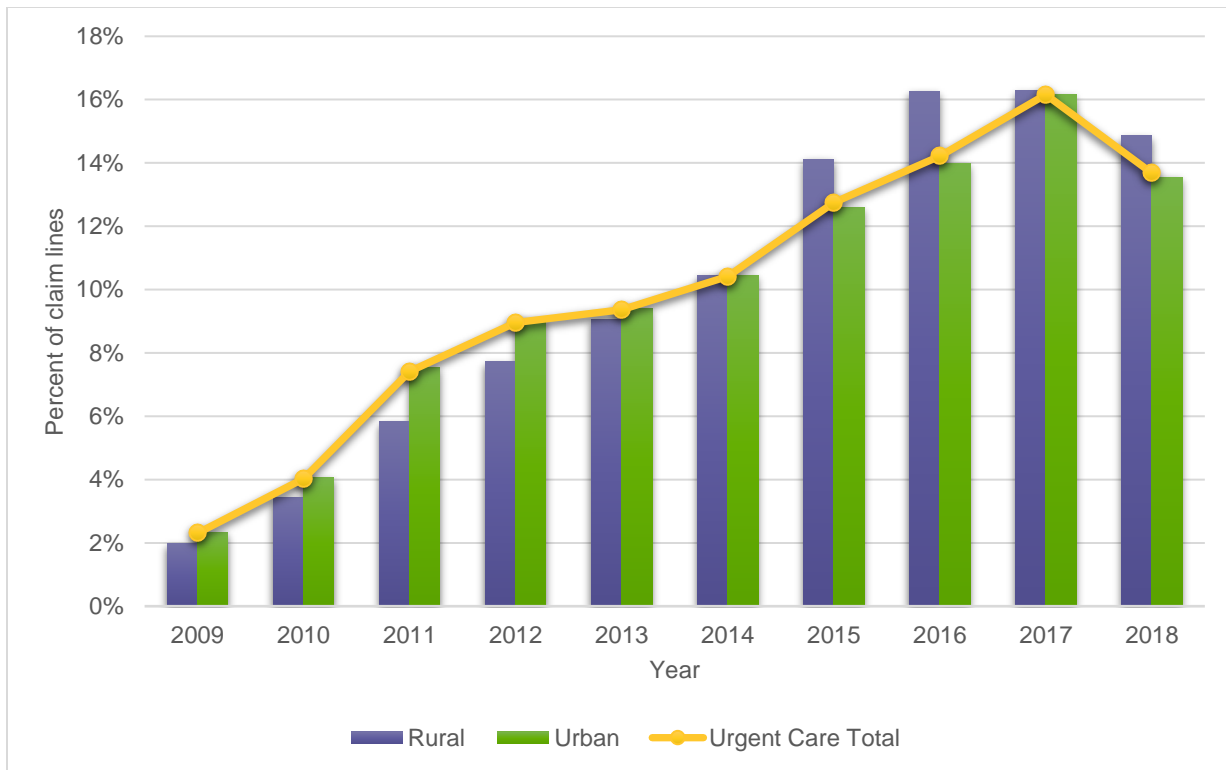


Figure 9. Percent of claim lines with urgent care center usage by rural, urban and national settings, 2009-2018

Figure 10 presents claim lines with urgent care center usage as a percentage of all medical claim lines by rural, urban and national settings. In all three settings, the percentage of all medical claim lines attributed to urgent care centers reached over 1 percent from 2016 to 2018.

From 2009 to 2018, rural urgent care center usage as a percentage of all rural medical claim lines grew from 0.15 percent to 1.15 percent, while its urban counterpart grew from 0.17 percent to 1.05 percent. Nationally, urgent care center usage as a percentage of total medical claim lines rose from 0.17 percent in 2009 to 1.06 percent in 2018.

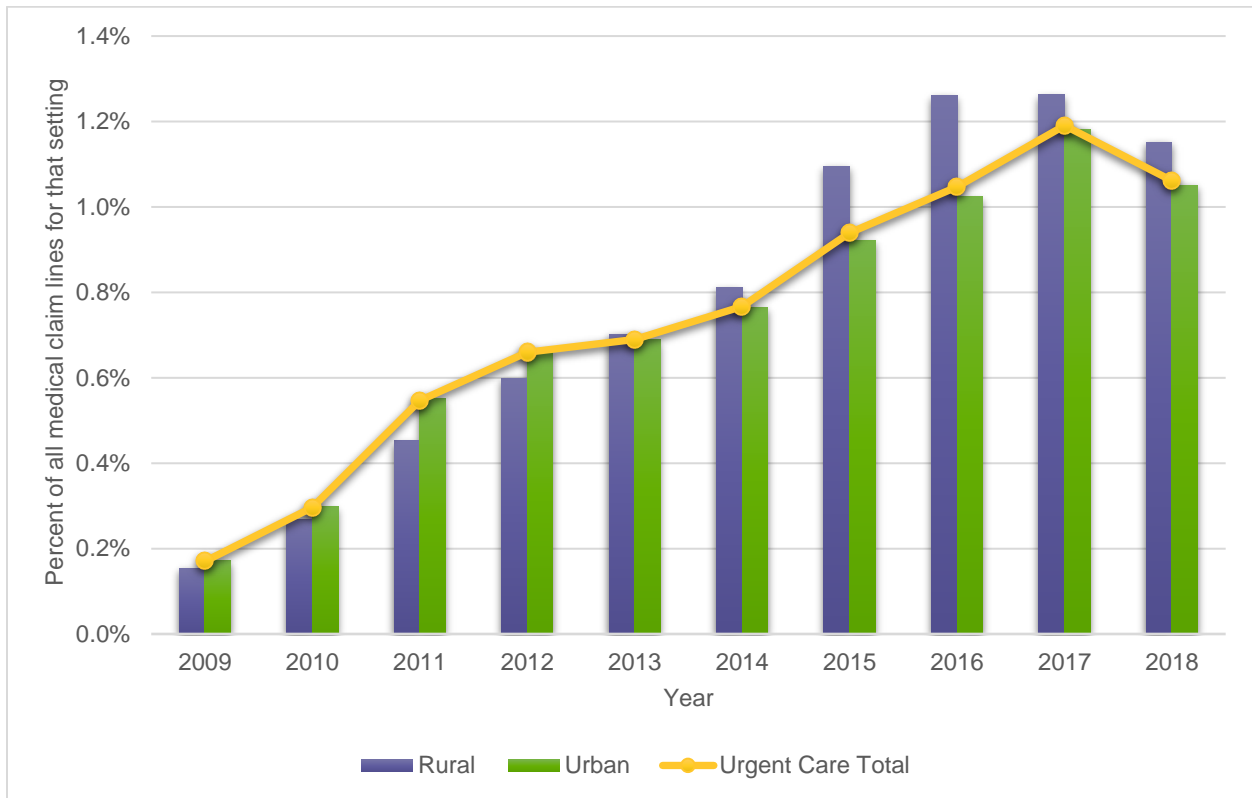


Figure 10. Claim lines with urgent care center usage as a percentage of all medical claim lines by rural, urban and national settings, 2009-2018

In 2018, the same states as in 2017 ranked in the top five for claim lines with urgent care center usage as a percentage of all medical claim lines by state—but their order was different (figure 11). In both years, Hawaii was number one, but Virginia moved from fifth place in 2017 to second place in 2018. New Mexico remained in third place; Louisiana fell from second to fourth place; and Maryland fell from fourth to fifth place.

The five jurisdictions with the lowest urgent care center usage in 2018 were North Dakota; Washington, DC; Iowa; Massachusetts; and Montana. These results were almost the same as those in 2017; the only difference was the inclusion of Montana in 2018 in place of Alaska. North Dakota had the lowest utilization rate in 2016 as well.

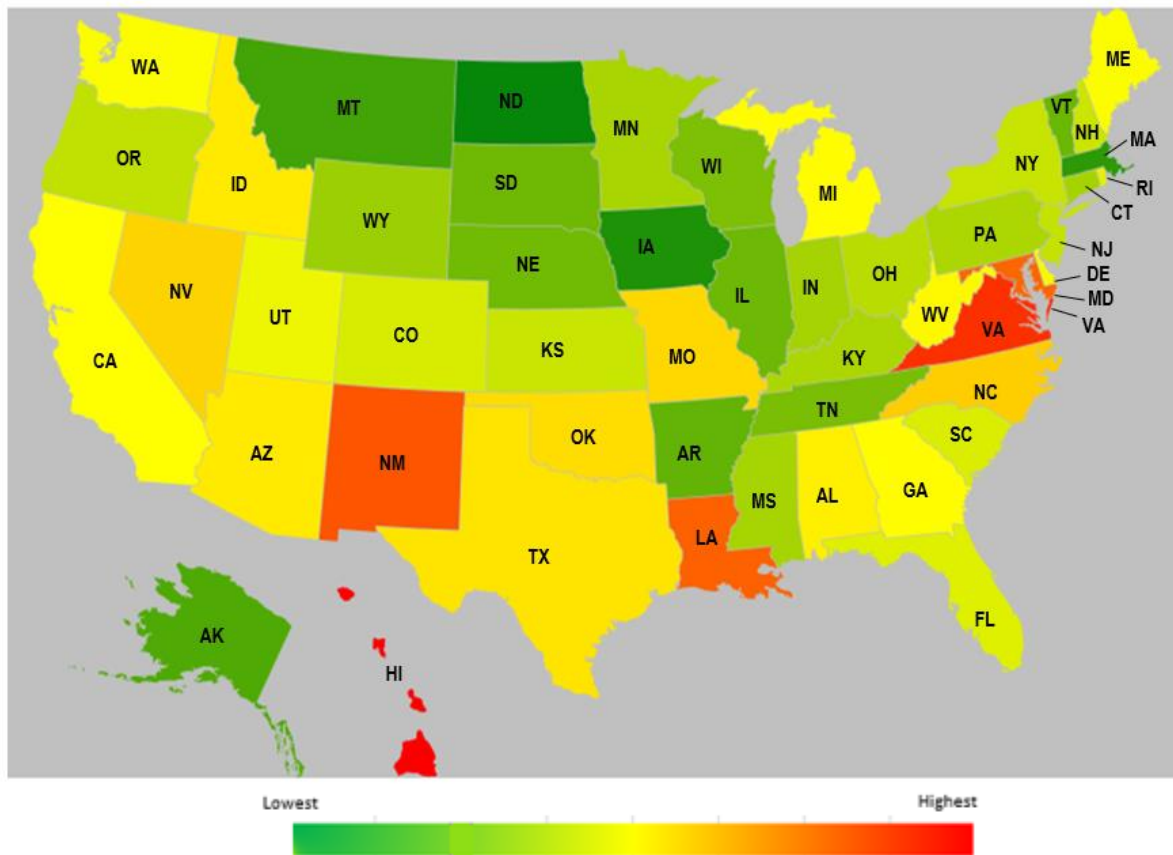


Figure 11. Percent of claim lines with urgent care center usage compared to all medical claim lines by state, 2018

As in 2016 and 2017, the age group with the greatest share of claim lines for urgent care center usage in 2018 was that of individuals aged 31 to 40 (18 percent all three years; figure 12). In 2018, as in 2017, pediatric patients (ages 0 to 18) accounted for 22 percent of urgent care center claim lines.

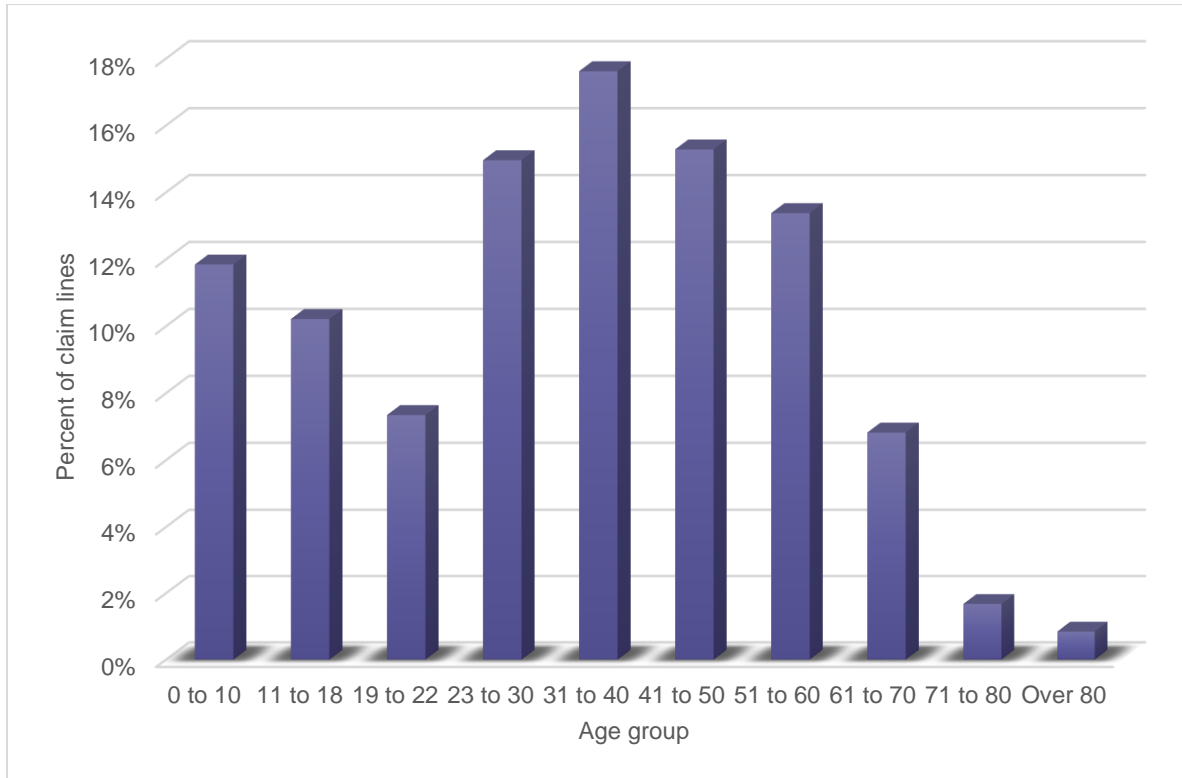


Figure 12. Percent of claim lines with urgent care center usage by age group, 2018

In 2018, as in 2016 and 2017, urgent care center claim lines for females exceeded those for males in every age group except 0-10 (figure 13). Women accounted for 59 percent to 64 percent of the claim lines in each age group from 19 years old to over 80.

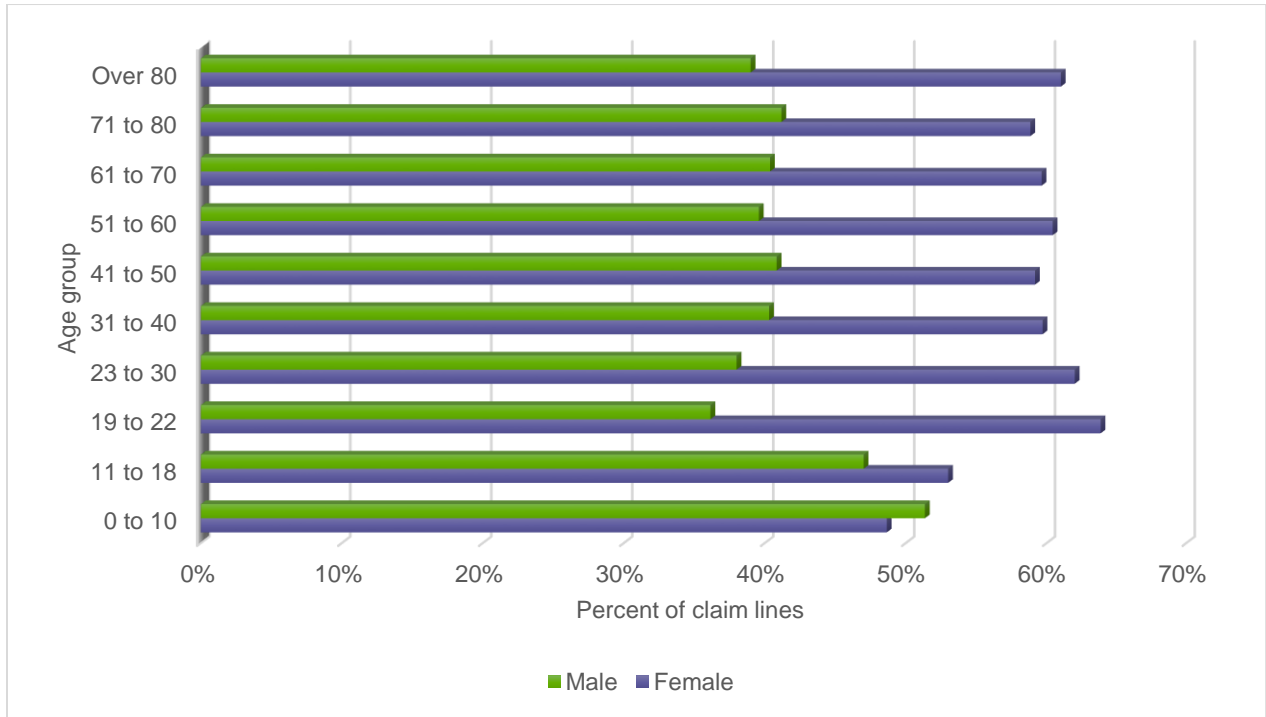


Figure 13. Percent of claim lines with urgent care center usage by age and gender, 2018

As in retail clinics (figure 6), and as in 2016 and 2017, acute respiratory infections were the most common diagnostic category in urgent care centers in 2018, accounting for 28 percent of claim lines that year in that place of service (figure 14). General signs and symptoms, with 16 percent of the distribution, remained the second most common diagnostic category as in 2016 and 2017, though the category was referred to in those reports as “general symptoms.” Sprains, strains, breaks and fractures, while still among the 10 most common diagnostic categories, fell from 3rd place in 2017 (with nine percent of the total claim lines for urgent care centers) to 10th place in 2018 (with four percent). Joint/soft tissue issues (seven percent), urinary tract infections (seven percent) and injury to body (six percent) were respectively in third, fourth and fifth place in 2018.

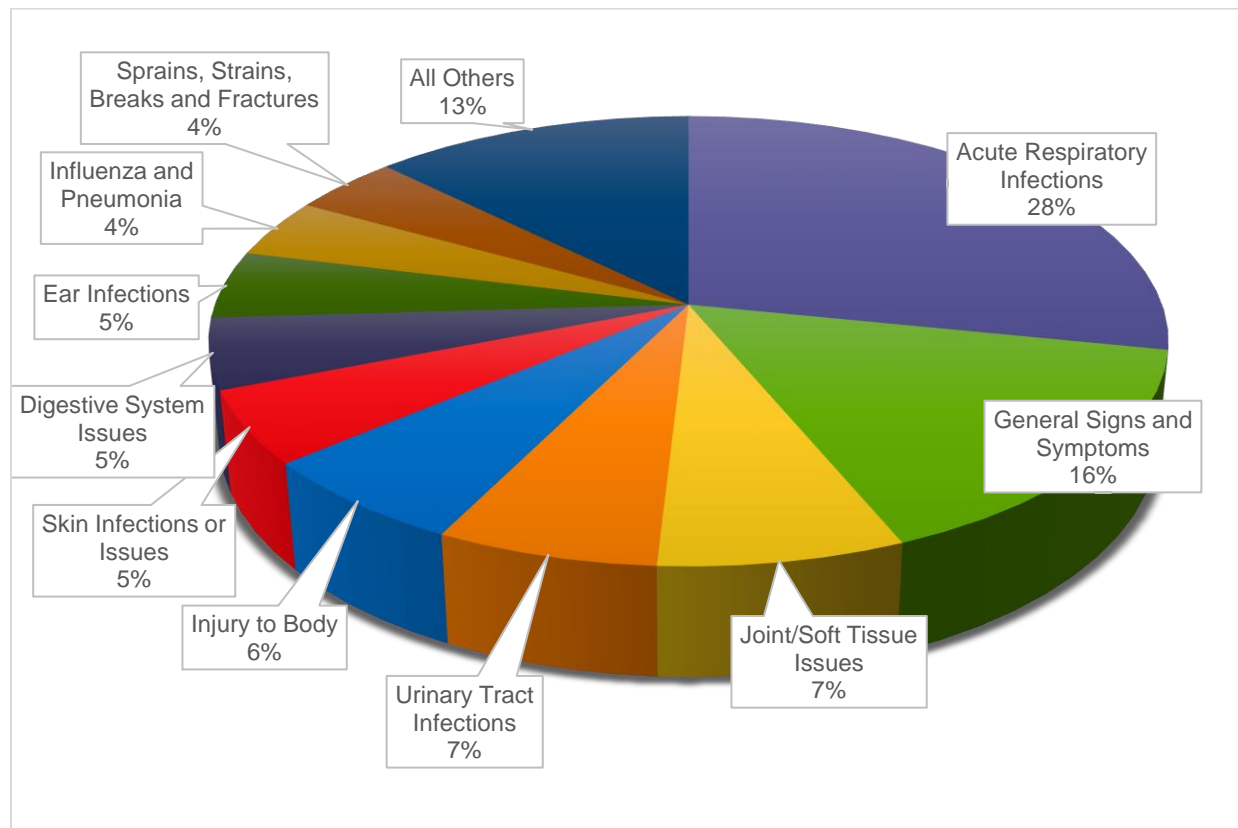


Figure 14. Distribution of claim lines with urgent care center usage by diagnostic category, 2018

As in retail clinics (figure 7), and as in 2016 and 2017, established patient office or other outpatient services were the most common procedure in urgent care centers in 2018, accounting for 31 percent of claim lines that year for that place of service (figure 15). While still among the 10 most common procedures, urgent care visits (S-codes) fell from second place in 2017 (with 18 percent of claim lines for urgent care centers) to fourth place in 2018 (10 percent). Different billing techniques and more specified claims may have been reasons for this change. New patient office or other outpatient services rose from third place in 2017 (15 percent) to second place in 2018 (18 percent).

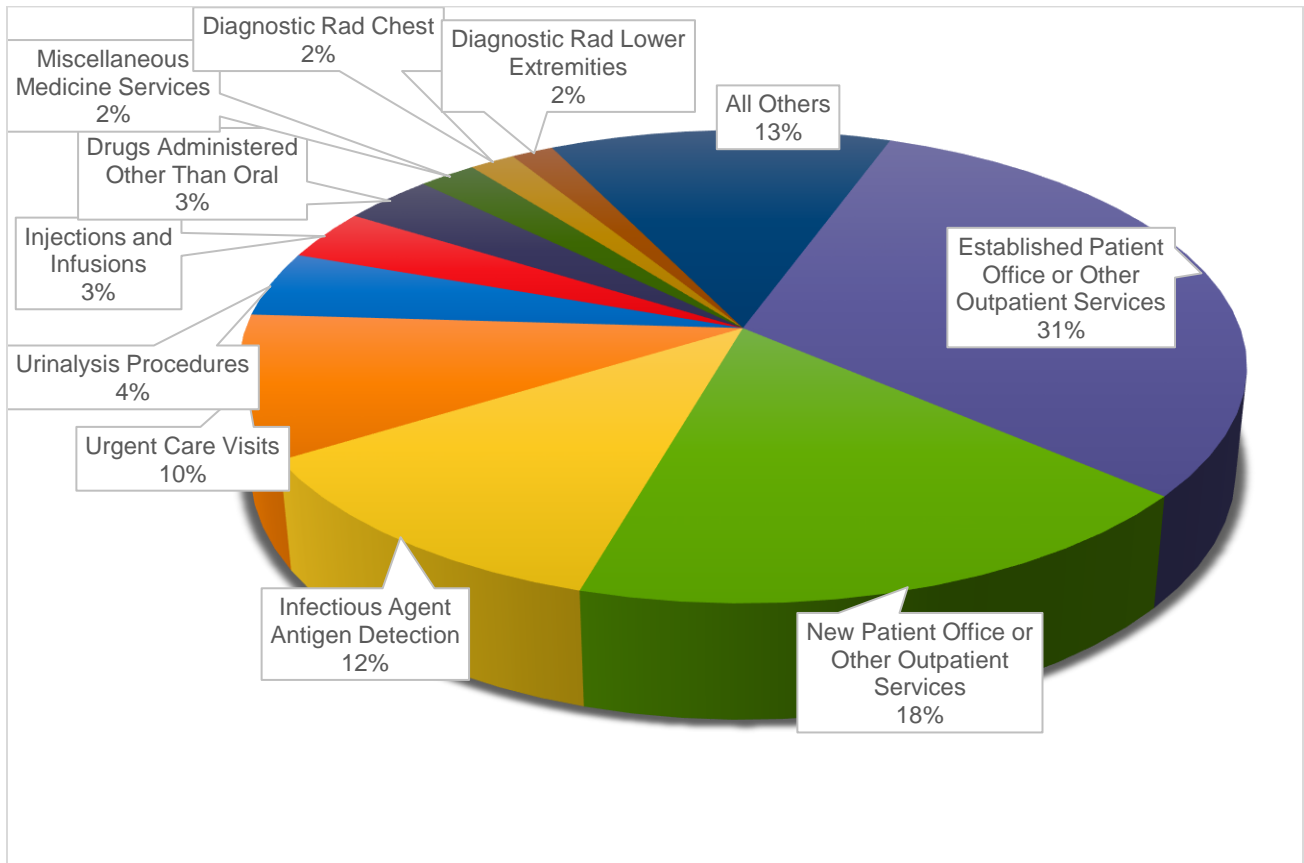
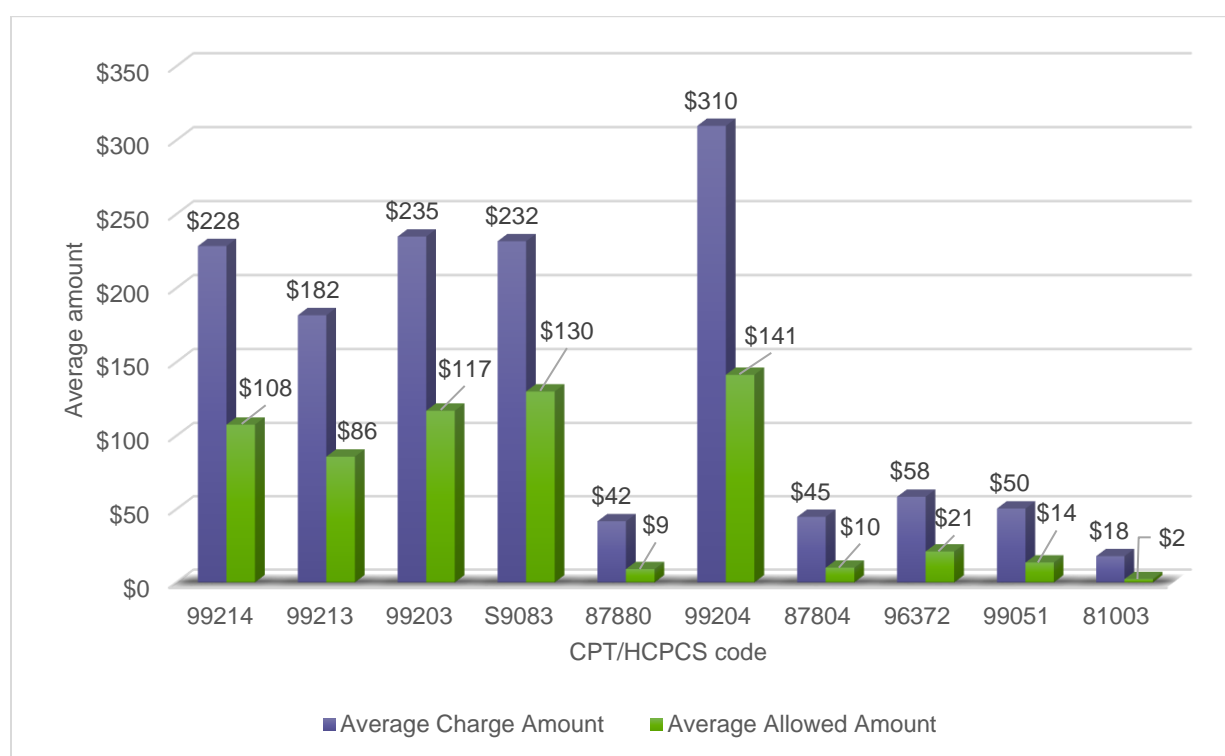


Figure 15. Distribution of claim lines with urgent care center usage by procedures, 2018. “Rad” is “radiology.”

As in 2016 and 2017, the average charges and average allowed amounts for many of the most common procedures in urgent care centers in 2018 were higher than in retail clinics (figure 16). As noted in last year’s report, this may be because urgent care centers need the technological capacity to treat more serious conditions, such as fractures. It may also be because an urgent care center must pay all of its own facility costs, such as rent, whereas retail clinics often share space inside a larger facility, such as a drugstore or supermarket.

In urgent care centers in 2018, national average charges for office visits ranged from \$182 (for CPT 99213, a 15-minute visit) to \$310 (for CPT 99204, a 45-minute new patient visit); respectively, average allowed amounts ranged from \$86 to \$141 for those same visits. By comparison, the average charge in a retail clinic for CPT 99213 in 2018 was \$107 and the average allowed amount \$63 (figure 8). S9083, the global urgent care center fee that typically covers all procedures within the urgent care setting, had an average charge of \$232 and an average allowed amount of \$130.



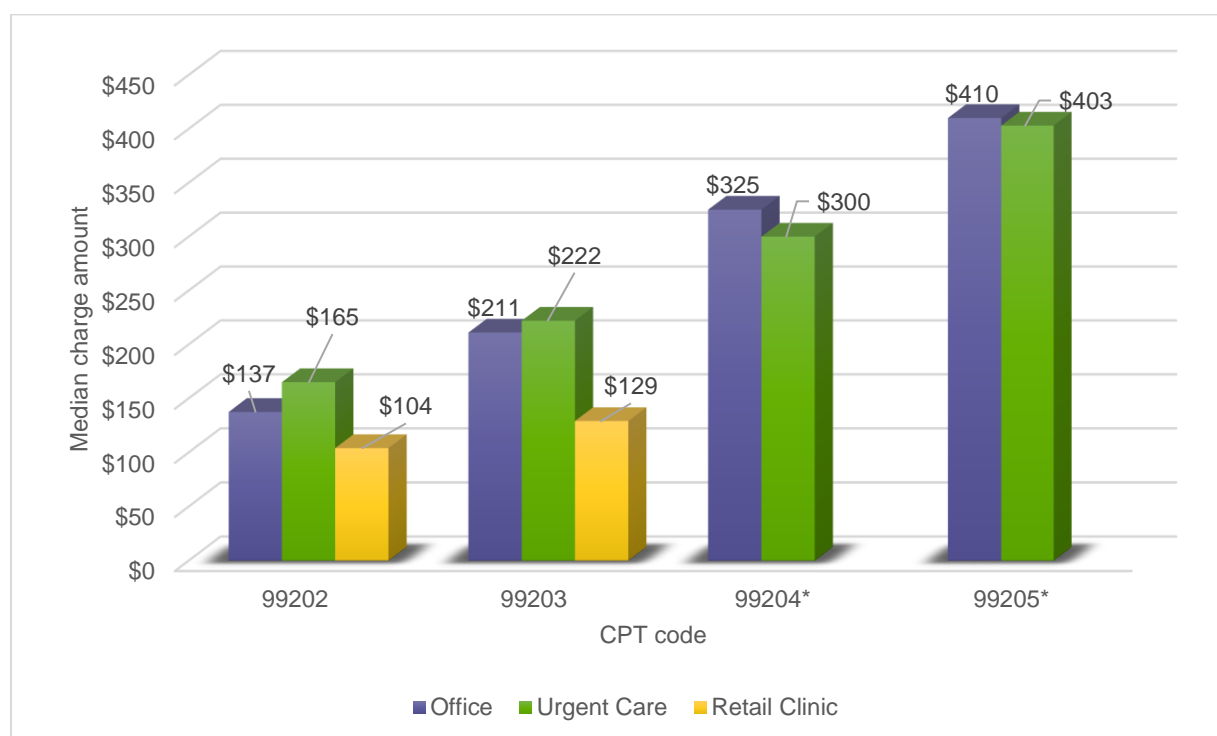
CPT/HCPCS Code	Description	CPT/HCPCS Code	Description
99214	Office outpatient visit – 25 minutes	99204	Office outpatient – new – 45 minutes
99213	Office outpatient visit – 15 minutes	87804	Flu test
99203	Office outpatient – new – 30 minutes	96372	Therapeutic, prophylactic or diagnostic injection Regularly scheduled evening, weekend or holiday office hours
S9083	Global fee urgent care centers	99051	Regularly scheduled evening, weekend or holiday office hours
87880	Streptococcus test	81003	Urinalysis

Figure 16. Average charges and average allowed amounts for the most common procedures performed in urgent care centers, 2018

Retail Clinic, Urgent Care Center and Office: A Price Comparison

As in previous years, for a comparison of prices at retail clinics, urgent care centers and traditional offices, FAIR Health analyzed claims data for new patient E&M codes. A new patient E&M visit includes a detailed history for the patient, a detailed examination and medical decision making. Counseling and coordination of care with other providers also may occur. The visits are coded by length of time: CPT 99202 is 20 minutes, CPT 99203 is 30, CPT 99204 is 45 and CPT 99205 is 60.

In 2018, the median charge amounts across offices, urgent care centers and retail clinics (figure 17) showed relative differences similar to those seen in 2017. CPT 99202 ranged from \$104 in a retail clinic to \$137 in an office to \$165 in an urgent care center. CPT 99203 ranged from \$129 in a retail clinic to \$211 in an office to \$222 in an urgent care center. CPT 99204 and CPT 99205 were not billed frequently enough in retail clinics to have established values. But in offices in 2018, the median charge amount for CPT 99204 was higher (\$325) than in urgent care centers (\$300)—the same relationship as in 2017. With respect to CPT 99205, there was a difference between years. In 2017, the median charge amount was the same (\$400) for offices and urgent care centers, but, in 2018, that value was slightly higher for offices (\$410) than for urgent care centers (\$403).



CPT Code	Description
99202	Office outpatient – new – 20 minutes
99203	Office outpatient – new – 30 minutes
99204	Office outpatient – new – 45 minutes
99205	Office outpatient – new – 60 minutes

* Retail clinics did not have enough volume to establish any values for CPT 99204 or CPT 99205.

Figure 17. Median charge amounts for offices, urgent care centers and retail clinics for new patient E&M codes, 2018

When the same comparisons among retail clinics, urgent care centers and offices were made on the basis of median allowed amounts, the results were similar (figure 18). Median allowed amounts, however, were closer between offices and retail clinics than median charge amounts were. In the case of CPT 99202, the median allowed amount for an office (\$77) was only \$2 more than for a retail clinic (\$75), compared to a \$33 difference between the corresponding charge amounts (respectively, \$137 and \$104; figure 17). By comparison, in 2017, the office had a lower median allowed amount (\$66) than the retail clinic (\$73).

Another difference from 2017 was that the median allowed amount for CPT 99204 in 2018 was higher for offices (\$179) than urgent care centers (\$173). In 2017, the median allowed amount for that code was slightly lower for offices (\$140) than for urgent care centers (\$143).



CPT Code	Description
99202	Office outpatient – new – 20 minutes
99203	Office outpatient – new – 30 minutes
99204	Office outpatient – new – 45 minutes
99205	Office outpatient – new – 60 minutes

* Retail clinics did not have enough volume to establish any values for CPT 99204 or CPT 99205.

Figure 18. Median allowed amounts for offices, urgent care centers and retail clinics for new patient codes, 2018

Telehealth

Telehealth usage increased nationally 785 percent from 2013 to 2018 (figure 19), a smaller rate of growth than in the period 2012-2017 reported last year (1,202 percent). The rural increase in telehealth claim lines from 2013 to 2018 was 212 percent and the urban increase 829 percent. In the last year of that period, from 2017 to 2018, rural areas showed a decline in telehealth usage of nine percent—the first decline in rural telehealth usage in the 2013-2018 period. This compared to an increase of 11 percent in telehealth usage for urban areas and 12 percent growth nationally from 2017 to 2018. In the previous year, from 2016 to 2017, rural growth had been 29 percent, urban growth 55 percent and national growth 53 percent. The rural/urban designation is based on where the patient was receiving care.

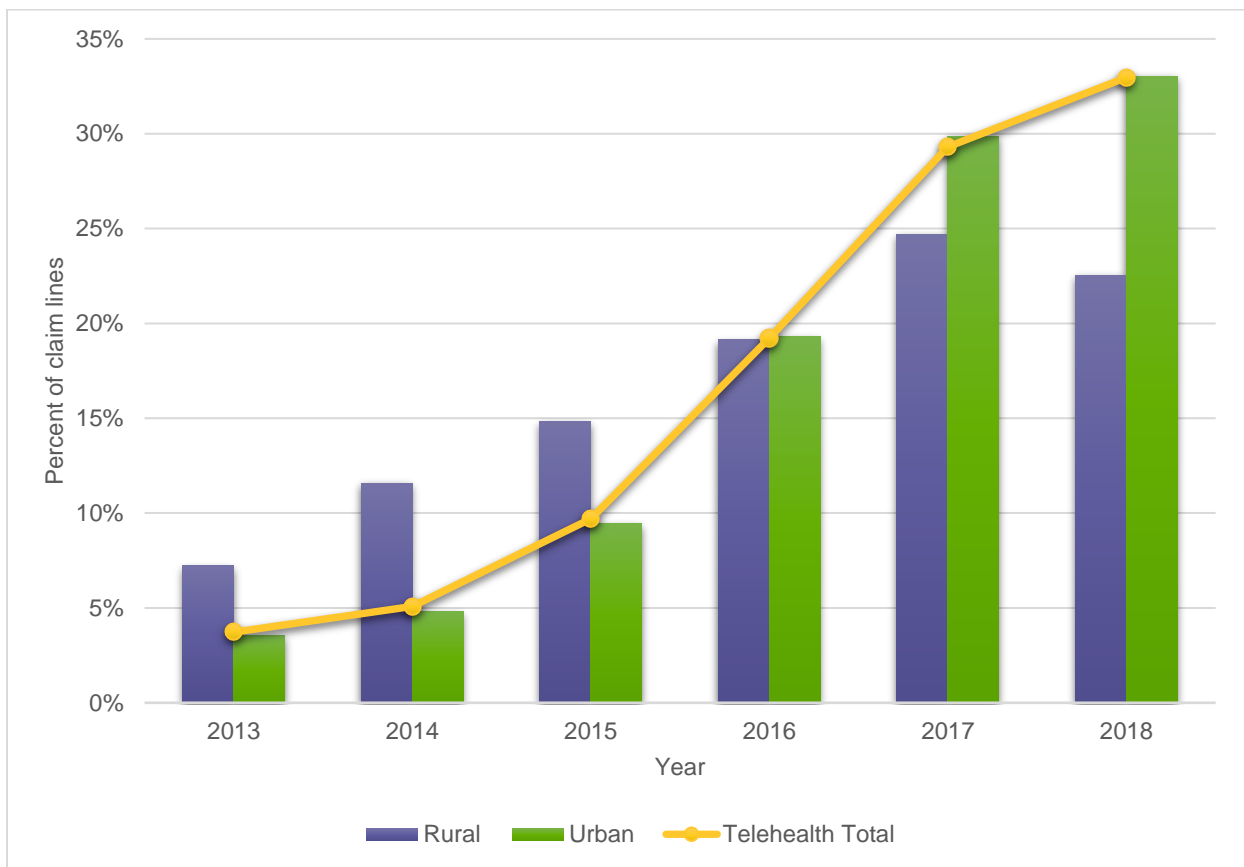


Figure 19. Percent of claim lines with telehealth usage by rural, urban and national settings, 2013-2018

Figure 20 shows claim lines with telehealth usage as a percentage of all medical claim lines by rural, urban and national settings. From 2017 to 2018, rural telehealth claim lines decreased from 0.0548 percent of all rural medical claim lines to 0.0500 percent. In the same period, urban telehealth claim lines increased from 0.1176 percent of all urban medical claim lines to 0.1300 percent, and national telehealth claim lines grew from 0.1108 percent of all national claim lines to 0.1247 percent.

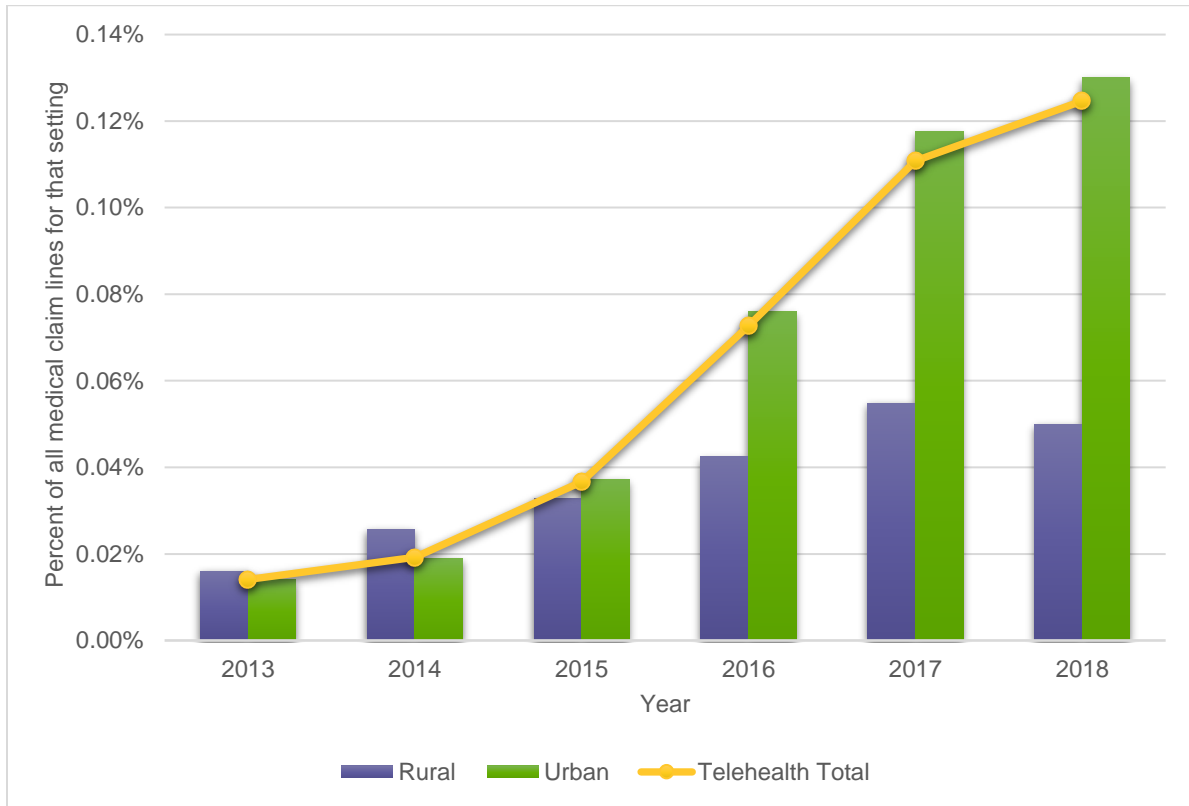


Figure 20. Claim lines with telehealth usage as a percentage of all medical claim lines by rural, urban and national settings, 2013-2018

The top three states for telehealth claim lines as a percentage of all medical claim lines by state remained the same in 2018 as in 2017: in order from most to least, Oklahoma, Wyoming and Ohio (figure 21). West Virginia, which had been in fifth place in 2017, moved to fourth place in 2018. Texas joined the top five in fifth place in 2018, and Hawaii, which had been in fourth place in 2017, dropped out of the top five. The assignment of services to a state is based on where the patient was receiving care.

The five states with the lowest telehealth use rates in 2018 were, in order from least to most, Minnesota, Rhode Island, Montana, Massachusetts and South Dakota. Rhode Island and South Dakota were also in the lowest-use tier in 2017. New Jersey, Nebraska and Connecticut were among the lowest five states for telehealth use in 2017 but not in 2018.

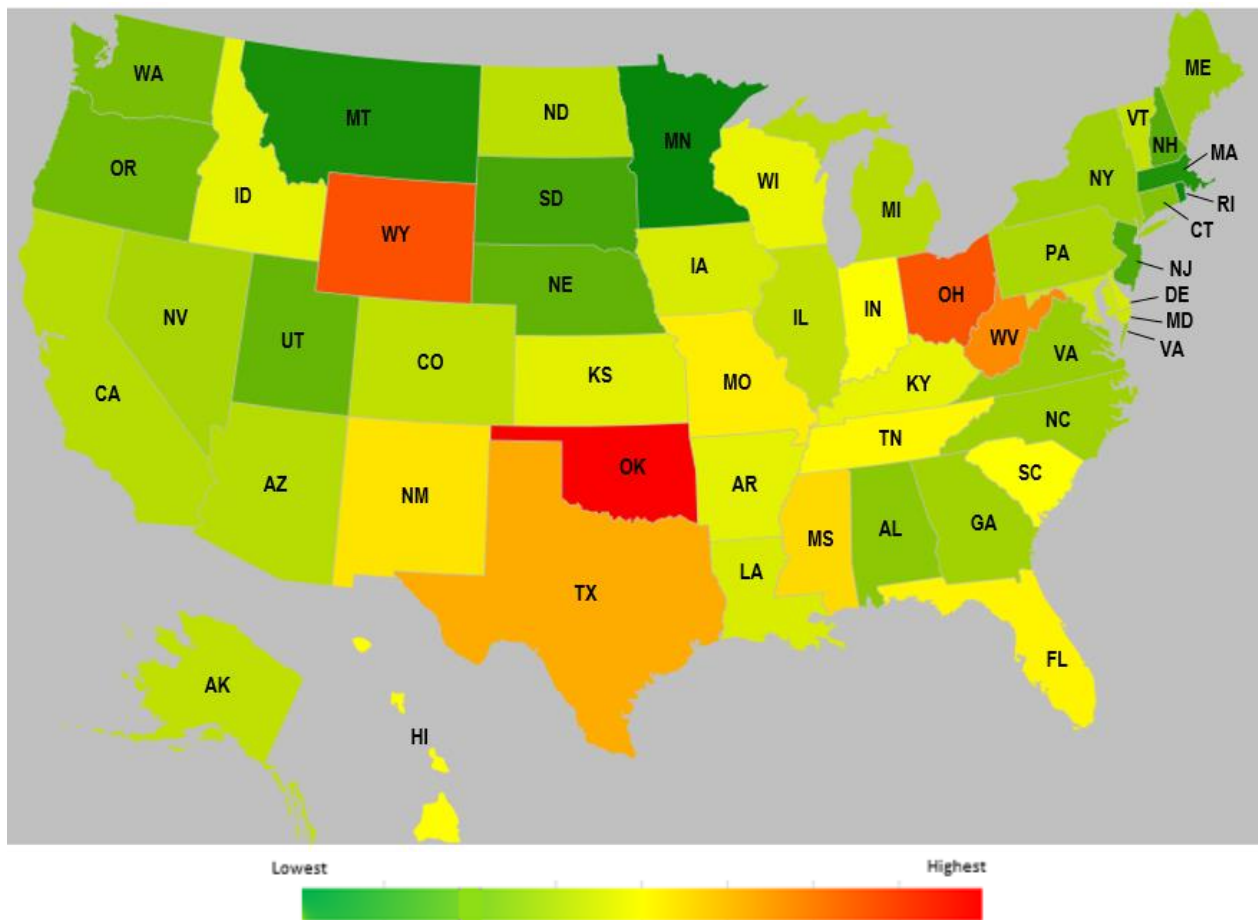


Figure 21. Percent of claim lines with telehealth usage compared to all medical claim lines by state, 2018

As in 2016 and 2017, telehealth in 2018 was most associated with individuals aged 31-60, who accounted for 55 percent of the distribution of telehealth claim lines that year (figure 22). Within that range, however, the distribution became less evenly divided. The 31-40 age group had a larger share (20 percent) than the 41-50 age group (18 percent) and 51-60 age group (17 percent), whereas in the two previous years the distribution among the three age groups had been more similar.

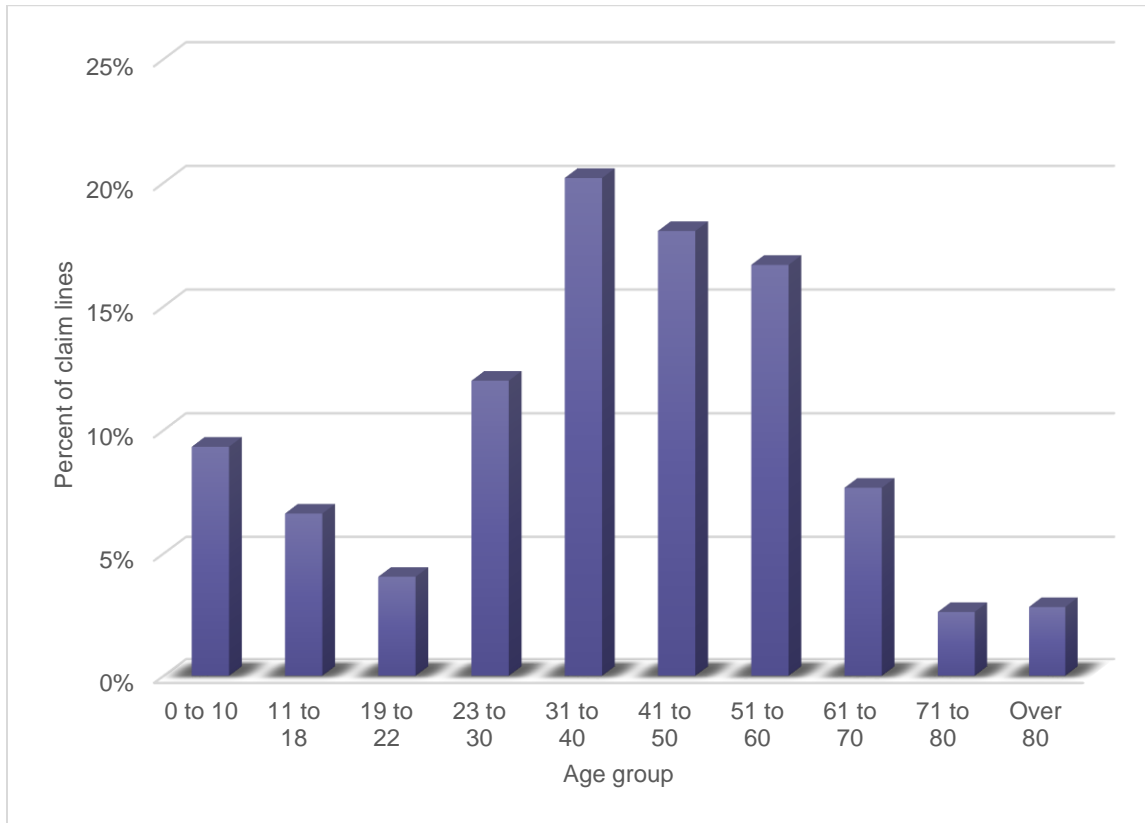


Figure 22. Percent of claim lines with telehealth usage by age group, 2018

As in 2016 and 2017, claim lines with telehealth usage in 2018 were submitted more for females than for males in every age group except children aged 0-10 (figure 23). The discrepancy was greatest in the age group 23-30, in which women accounted for 70 percent of all telehealth claim lines compared to 30 percent for men.

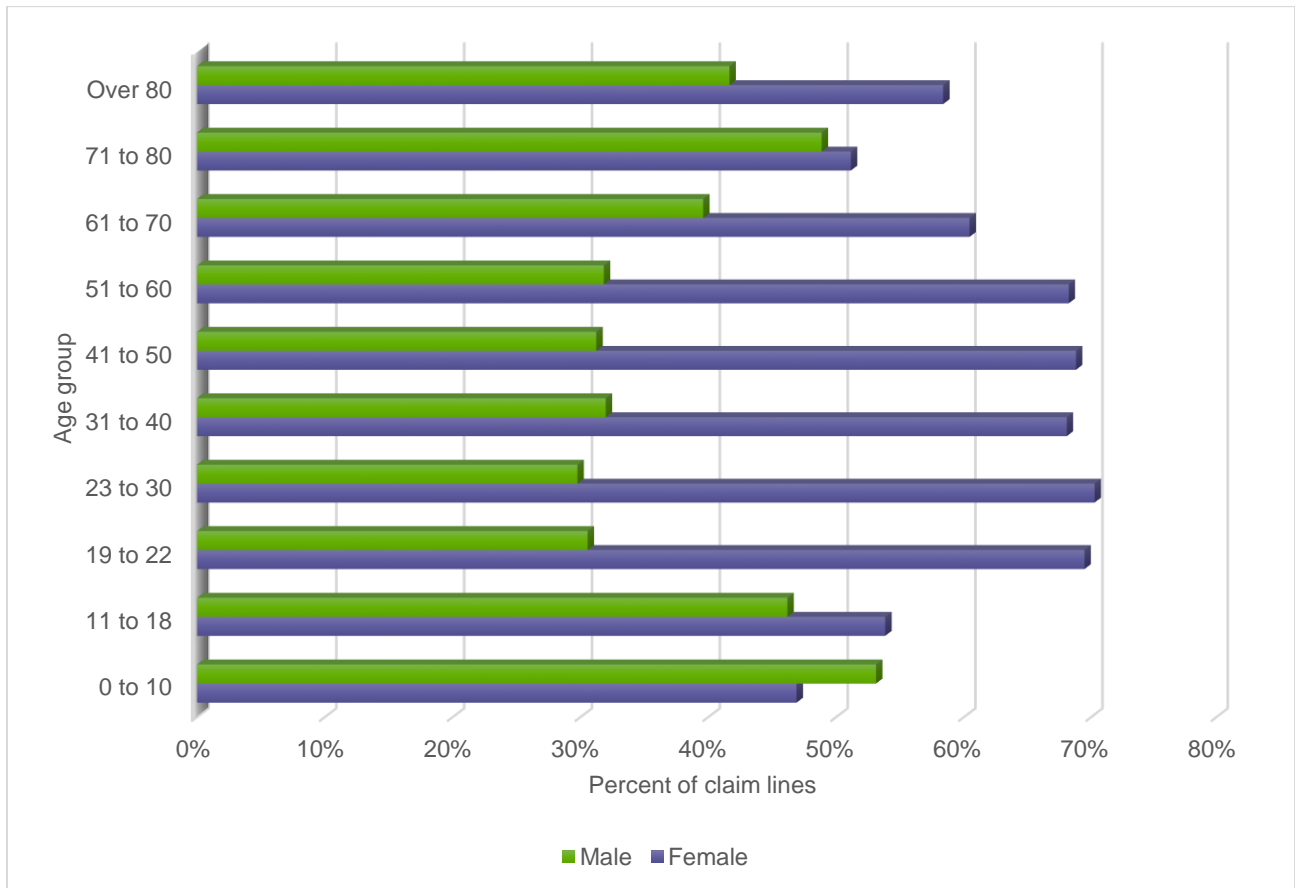


Figure 23. Percent of claim lines with telehealth usage by age and gender, 2018

The top five diagnostic categories associated with telehealth in 2018 (figure 24) were similar to the top five in 2017, though in somewhat different order and with one category (general signs and symptoms) dropping out of the top five and another joining (joint/soft tissue issues). From largest to smallest share, the top five in 2018 were: digestive system issues (e.g., gastroesophageal reflux disease, abdominal and pelvic pain, nausea and vomiting; 13 percent), acute respiratory infections (11 percent), injury to body (8 percent), joint/soft tissue issues (7 percent) and mental health reasons (7 percent). In 2017, mental health reasons also had been in fifth place with seven percent.

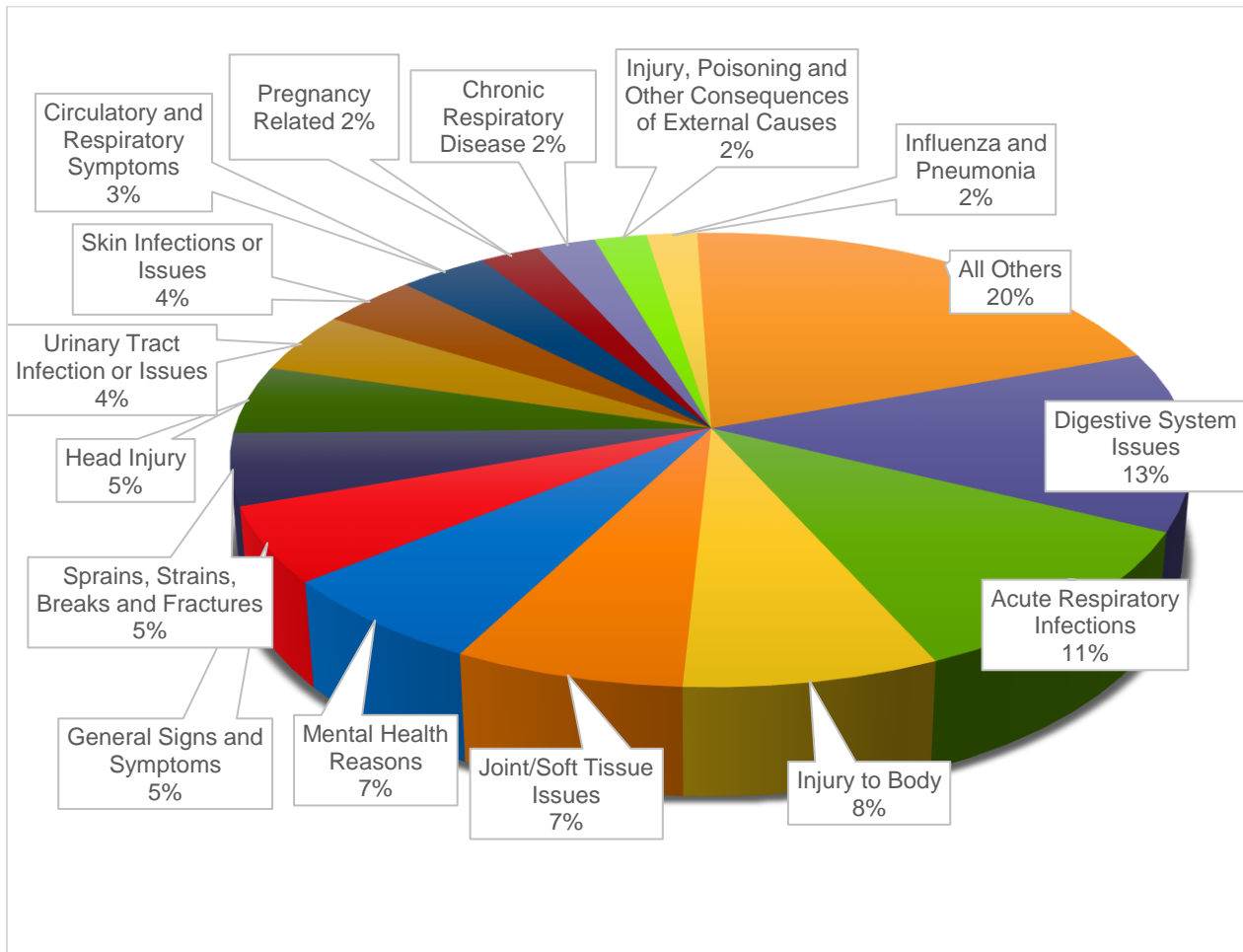


Figure 24. Distribution of claim lines with telehealth usage by diagnostic category, 2018

Ambulatory Surgery Center

Claim lines for ASCs grew 35 percent overall from 2009 to 2018 (figure 25), compared to 97 percent from 2008 to 2017. Unlike from 2008 to 2017, growth from 2009 to 2018 was greater in rural (40 percent) than urban areas (35 percent). ASC usage decreased 12 percent in the single year from 2017 to 2018 in rural, urban and national settings.

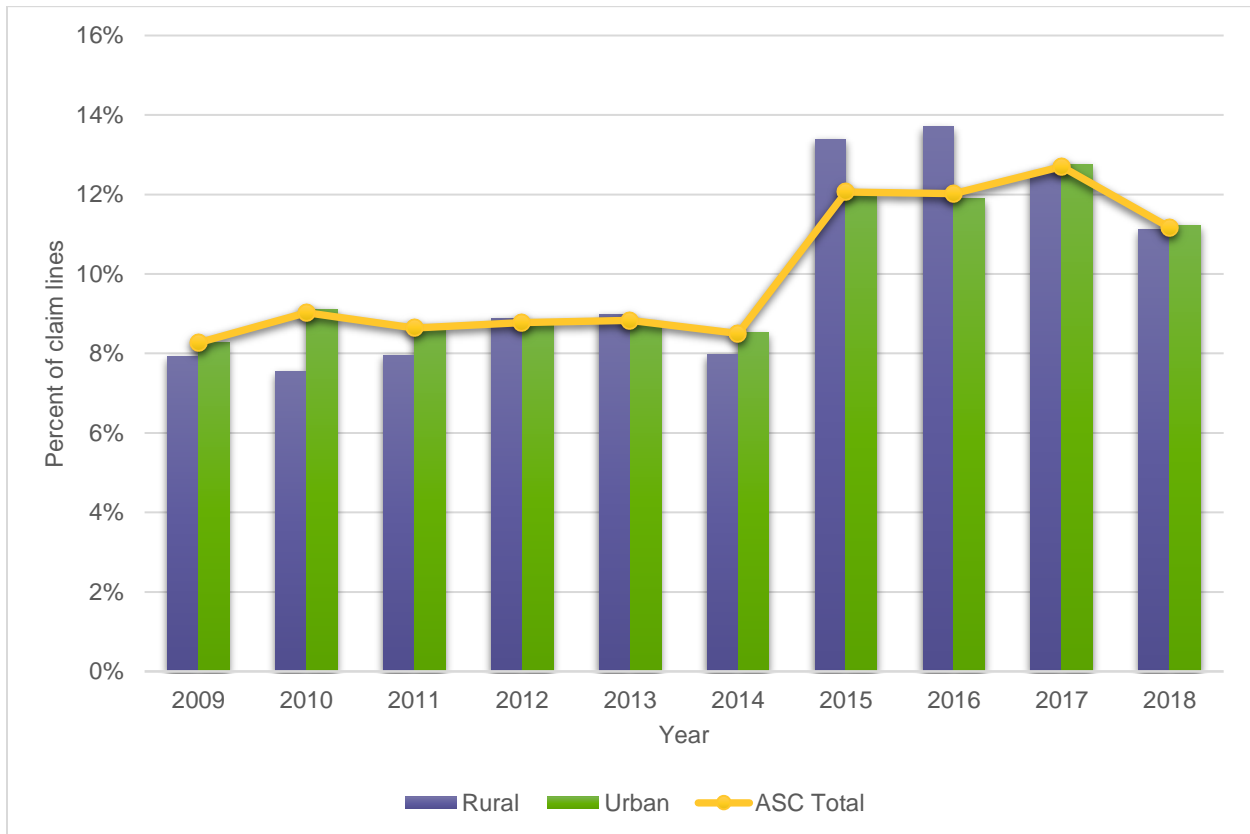


Figure 25. Percent of claim lines with ASC usage by rural, urban and national settings, 2009-2018

As in the period 2008 to 2017, ASCs in 2018 accounted for less than one percent of all medical claim lines by rural, urban and national settings (figure 26). From 2017 to 2018, the percentage of medical claim lines decreased in urban areas from 0.92 percent to 0.81 percent; in rural areas, the decline was from 0.84 percent to 0.74 percent. Nationally, the decrease was from 0.91 to 0.80 percent.

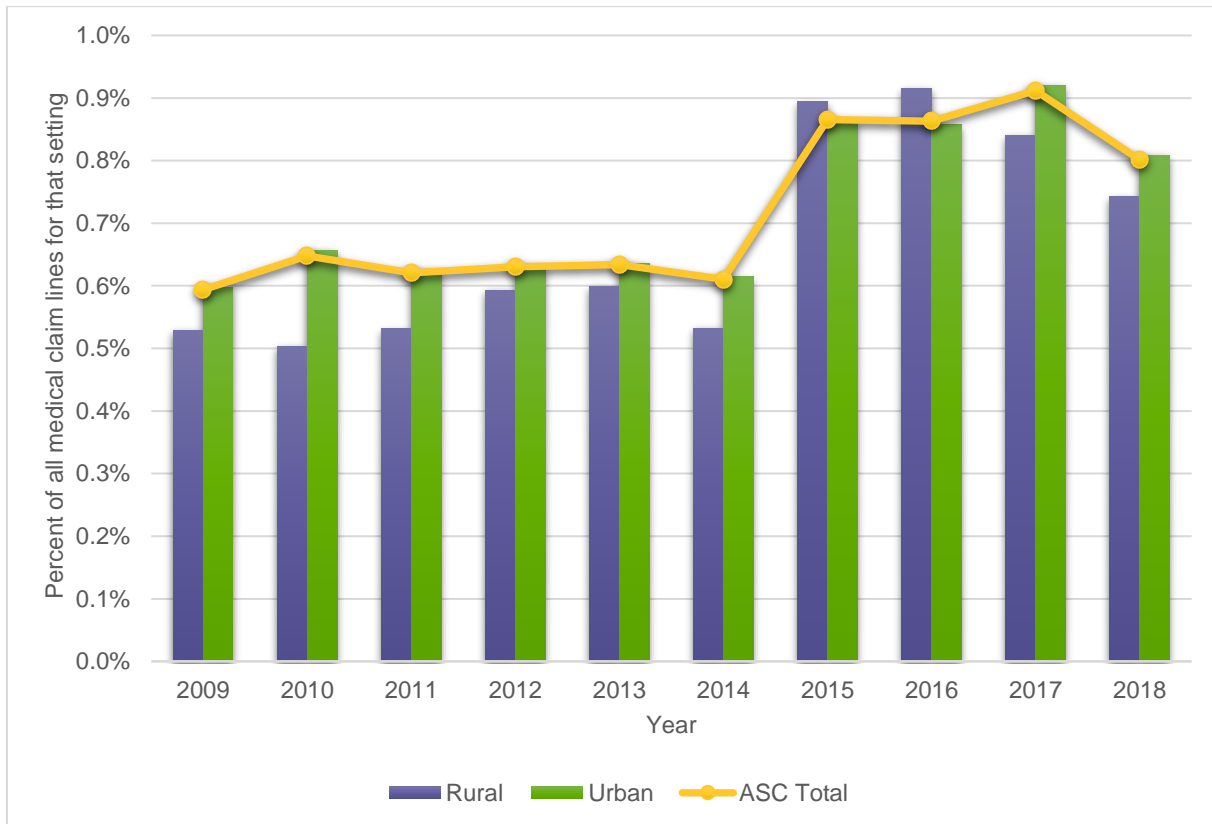


Figure 26. Claim lines with ASC usage as a percentage of all medical claim lines by rural, urban and national settings, 2009-2018

As with the other places of service studied for gender, and as in 2016 and 2017, more ASC claim lines in 2018 were submitted for females than males in almost every age group (figure 27). But while retail clinics, urgent care centers and telehealth had only one exceptional age group (0-10) in which males accounted for more of the claim line distribution than females, ASCs had a second such age group, 11-18. This pattern also occurred in 2016 and 2017.

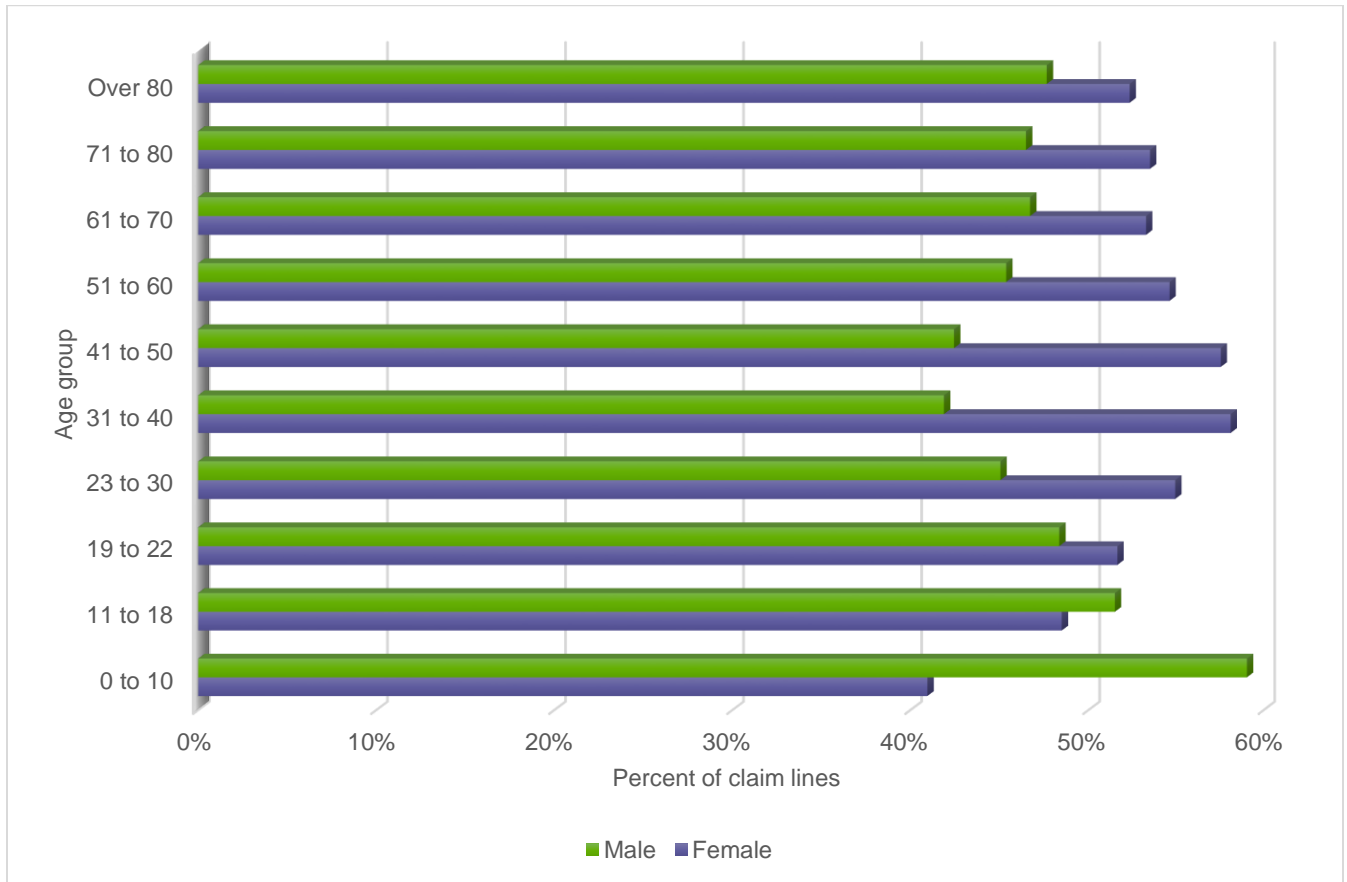


Figure 27. Percent of claim lines with ASC usage by age and gender, 2018

Emergency Room

Claim lines for ERs grew nationally 94 percent from 2009 to 2018 (figure 28), a smaller increase than that from 2008 to 2017 (194 percent). Urban growth from 2009 to 2018 (94 percent) continued to be greater than rural growth (69 percent), as it had been in the previous periods of 2008-2017 and 2007-2016.

From 2017 to 2018, ER usage in national, urban and rural settings declined 15 percent. This extended and sharpened a decrease in utilization that was also found from 2016 to 2017, when ER usage fell 10 percent in rural areas, 1 percent in urban areas and 2 percent nationally.

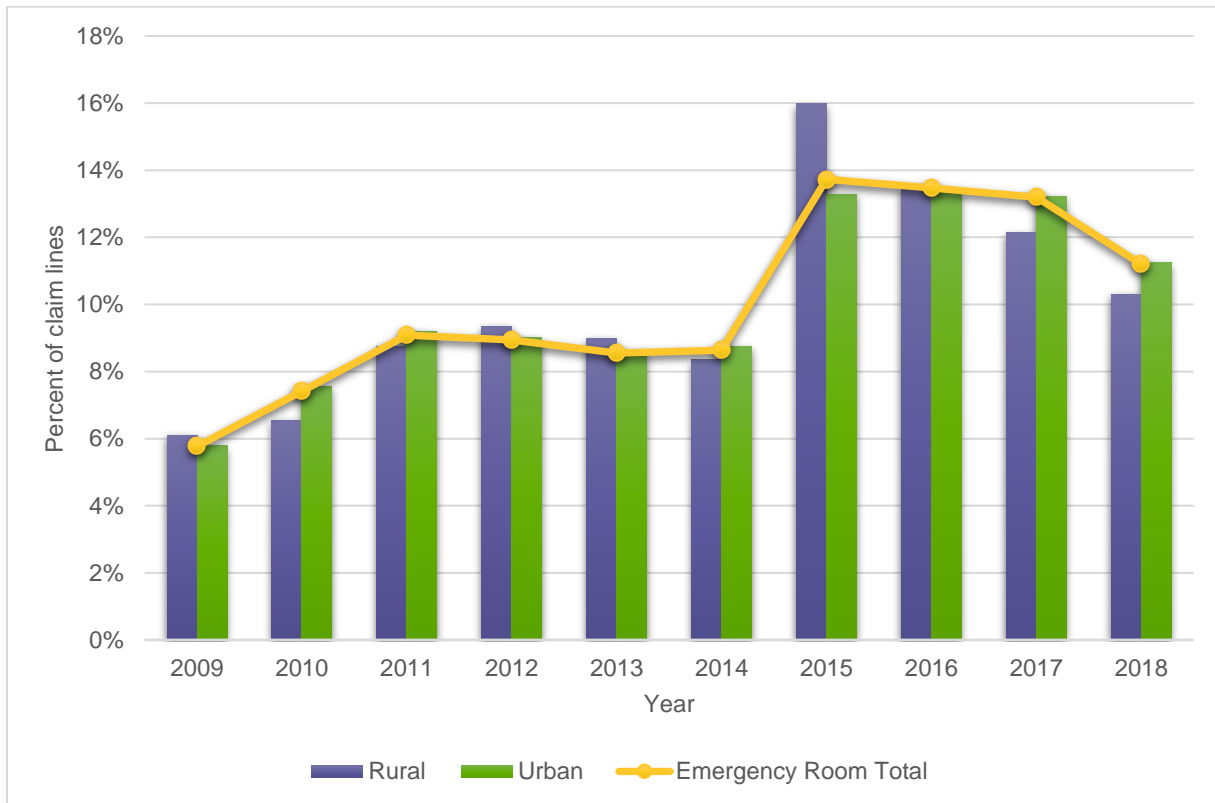


Figure 28. Percent of claim lines with ER usage by rural, urban and national settings, 2009-2018

In 2018, as in 2017, ERs accounted for a larger percentage of all medical claim lines than any of the other places of service studied for that variable in this report (figure 29). Nationally, the ER percentage of all medical claim lines grew from 1.14 percent in 2009 to 2.22 percent in 2018. By comparison, urgent care centers' percentage of all medical claim lines nationally was 1.06 percent in 2018 (figure 10). But growth in urgent care center usage from 2009 to 2018 (523 percent) was more than five times that of ERs (94 percent).

In the rural setting, the ER percentage of all medical claim lines for that setting grew from 1.57 percent in 2009 to 2.66 percent in 2018. In urban areas, the percentage grew from 1.12 percent in 2009 to 2.17 percent in 2018.

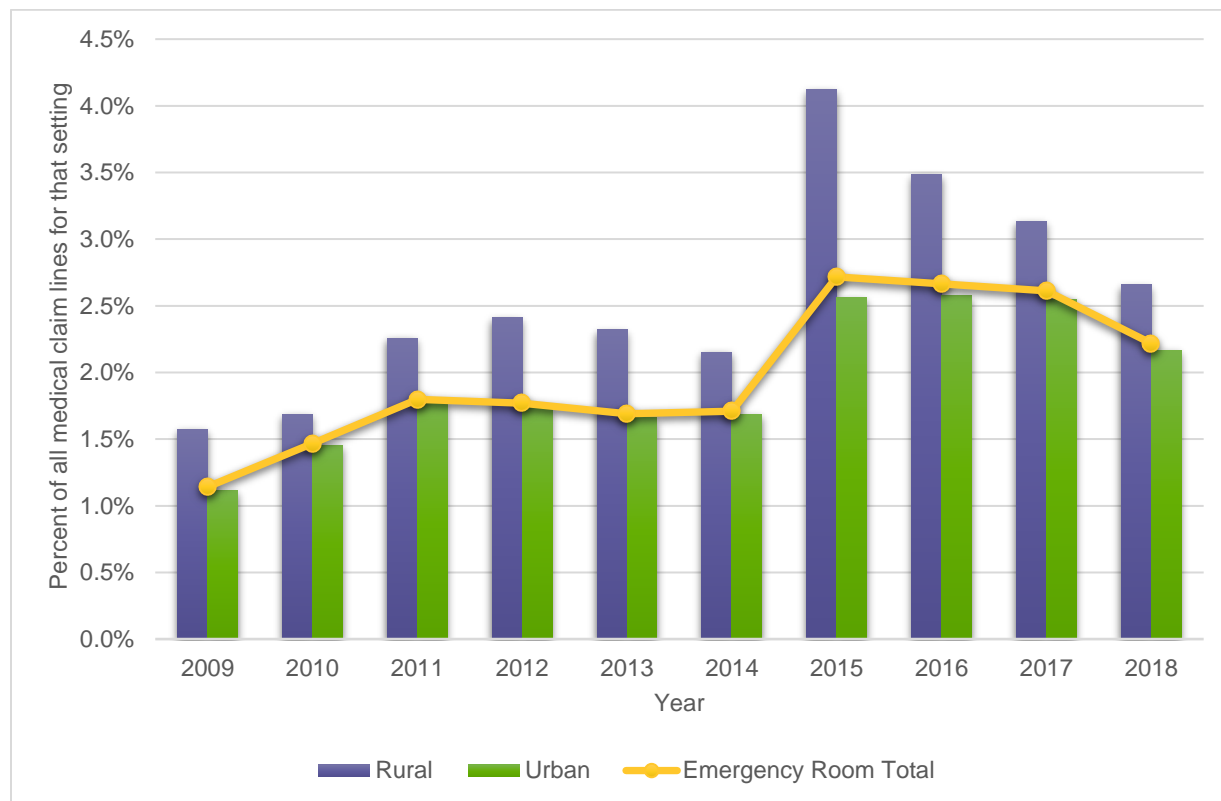


Figure 29. Claim lines with ER usage as a percentage of all medical claim lines by rural, urban and national settings, 2009-2018

As in 2017, the age group with the greatest share of claim lines for ER usage in 2018 was 51-60 (16 percent; figure 30). The age range 31 to 70, comprising the four age groups with the greatest share of claim lines, collectively accounted for 55 percent of the distribution. Pediatric patients (ages 0-18) accounted for the same percentage as in 2017 (12 percent).

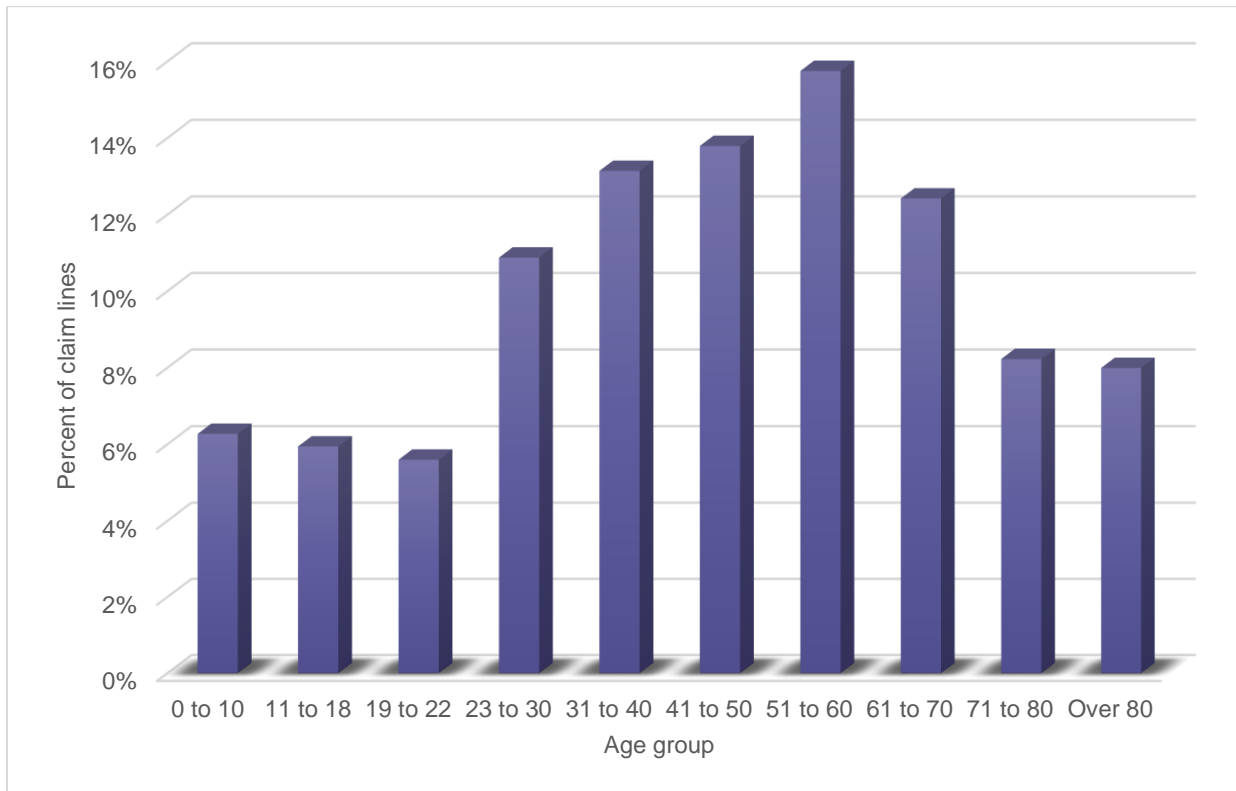


Figure 30. Percent of claim lines with ER usage by age group, 2018

As with all of the other places of service studied for gender, and as in 2017, more claim lines with ER usage in 2018 were submitted for females than males in most age groups (figure 31). The sole exception, as with retail clinics, urgent care centers and telehealth, was the age group 0-10, in which claim lines for boys (55 percent) outnumbered those for girls (45 percent). In the age group 11-18, the disparity between females (53 percent) and males (47 percent) was relatively small, but the gap widened for those in the age groups from 19 to 40, before narrowing again in the age groups 41 to 70.

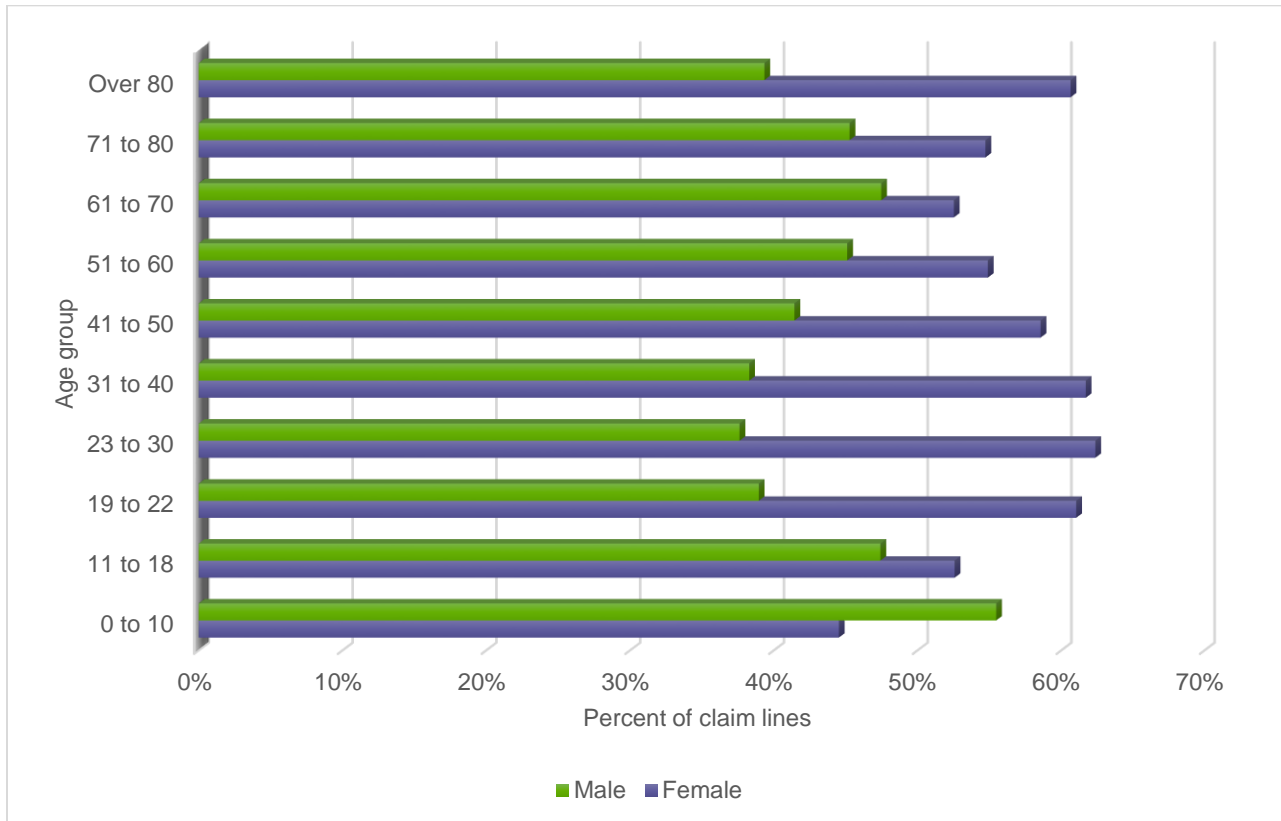


Figure 31. Percent of claim lines with ER usage by age and gender, 2018

Figure 32 shows the 2018 distribution of claim lines with ER usage by diagnostic category for individuals over the age of 22. The top five diagnostic categories were the same as in 2017, except that digestive system issues and acute respiratory infections switched places. In 2017, acute respiratory infections were in first place with 16 percent of the distribution, whereas in 2018 they were in second place with 12 percent. In 2017, digestive system issues were in second place with 14 percent; in 2018, they were in first place with 15 percent. In third, fourth and fifth places were, respectively, general signs and symptoms (9 percent in 2018), joint/soft tissue issues (8 percent) and injury to body (6 percent).

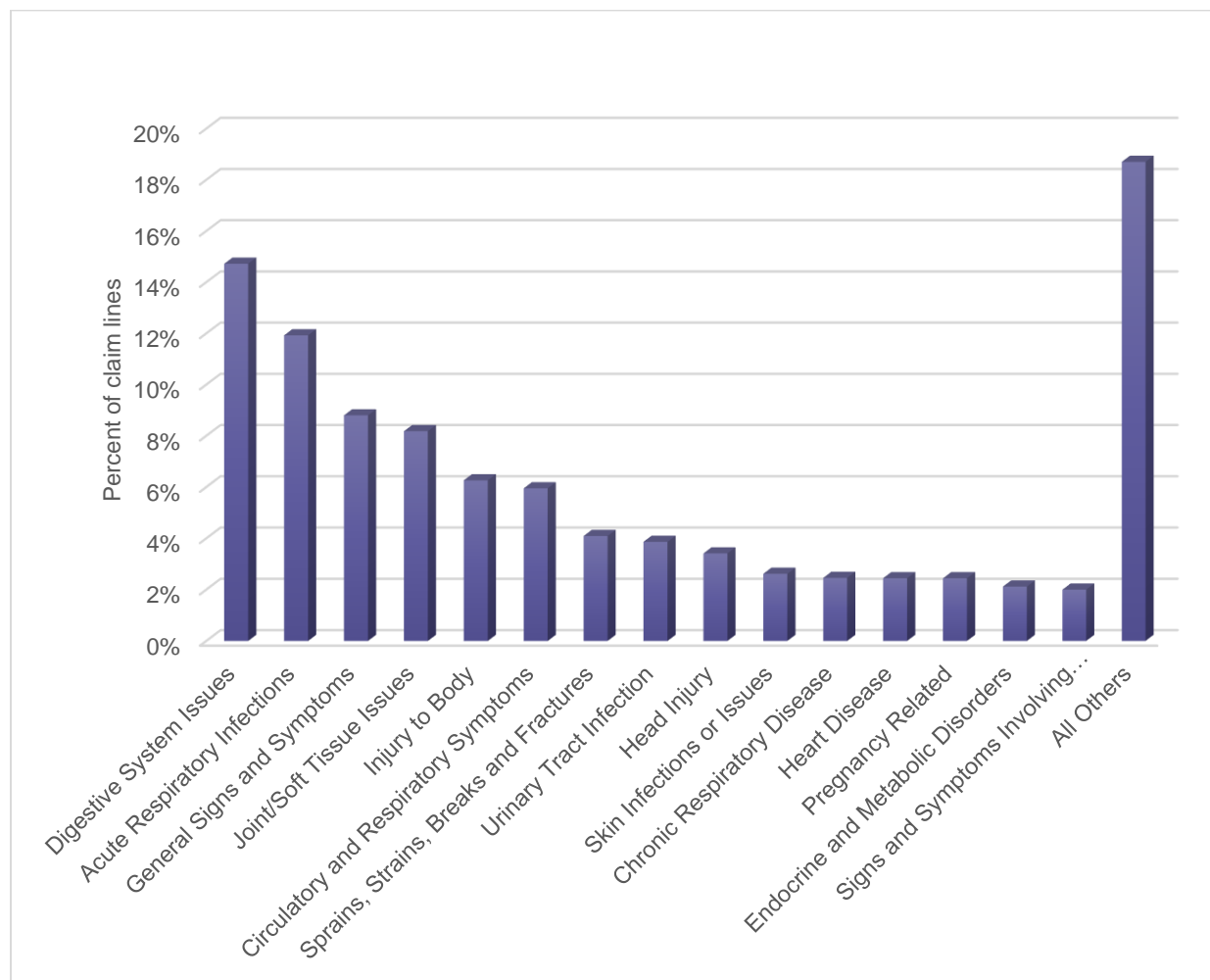


Figure 32. Distribution of claim lines with ER usage by diagnostic category for individuals over 22 years of age, 2018. Phrase with ellipse is “Signs and Symptoms Involving Behavior and Emotional State.”

The 2018 distribution of claim lines with ER usage by procedures for individuals in all age groups, not including E&Ms (figure 33), was similar to that in 2017. Again, diagnostic radiology of the chest was the most common procedure, with 19 percent of the 2018 distribution, and again cardiography procedures were in second place (16 percent). In third, fourth and fifth place, respectively, in 2018 were diagnostic radiology of the abdomen (eight percent), diagnostic radiology of the head and neck (eight percent) and diagnostic radiology of the lower extremities (five percent).

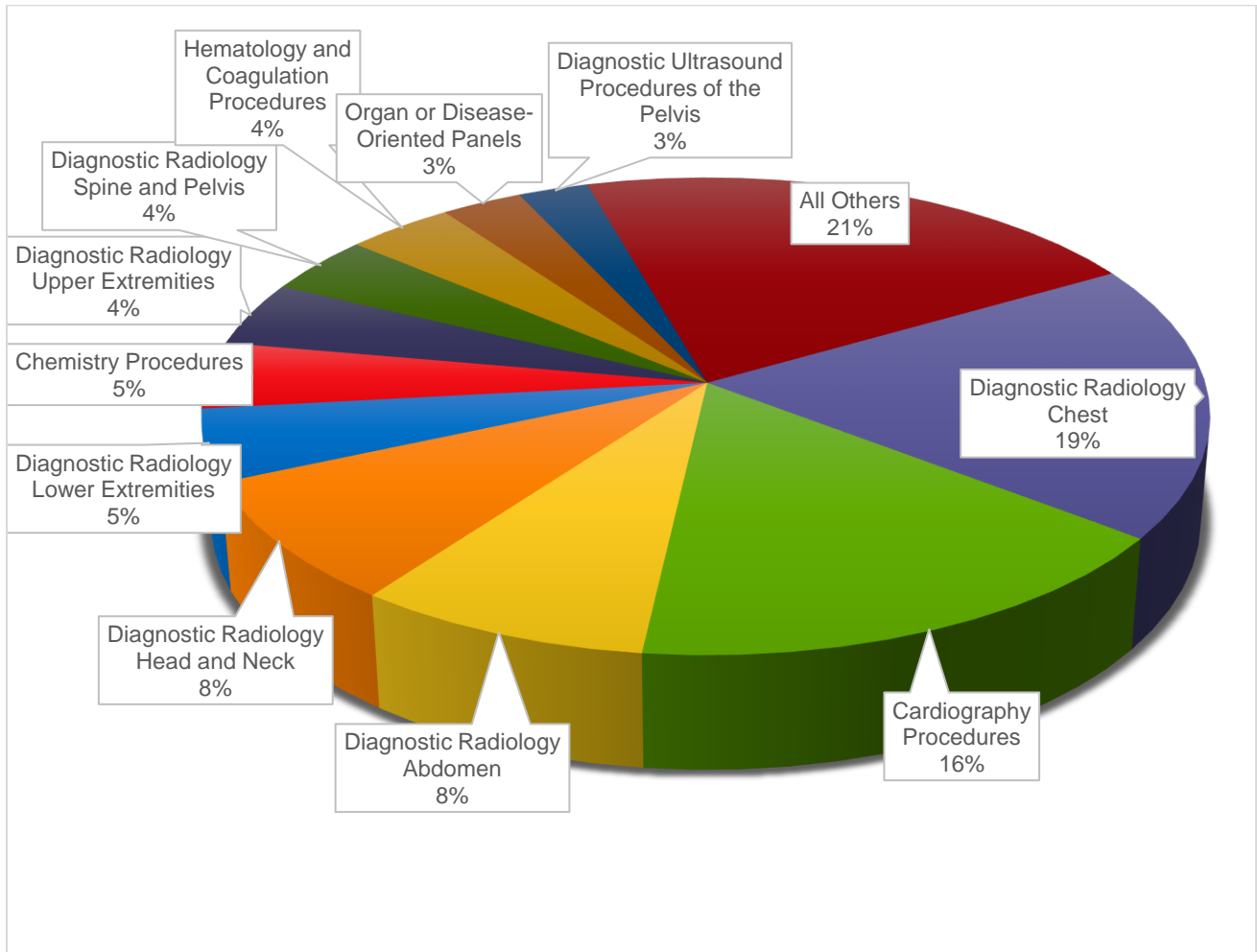
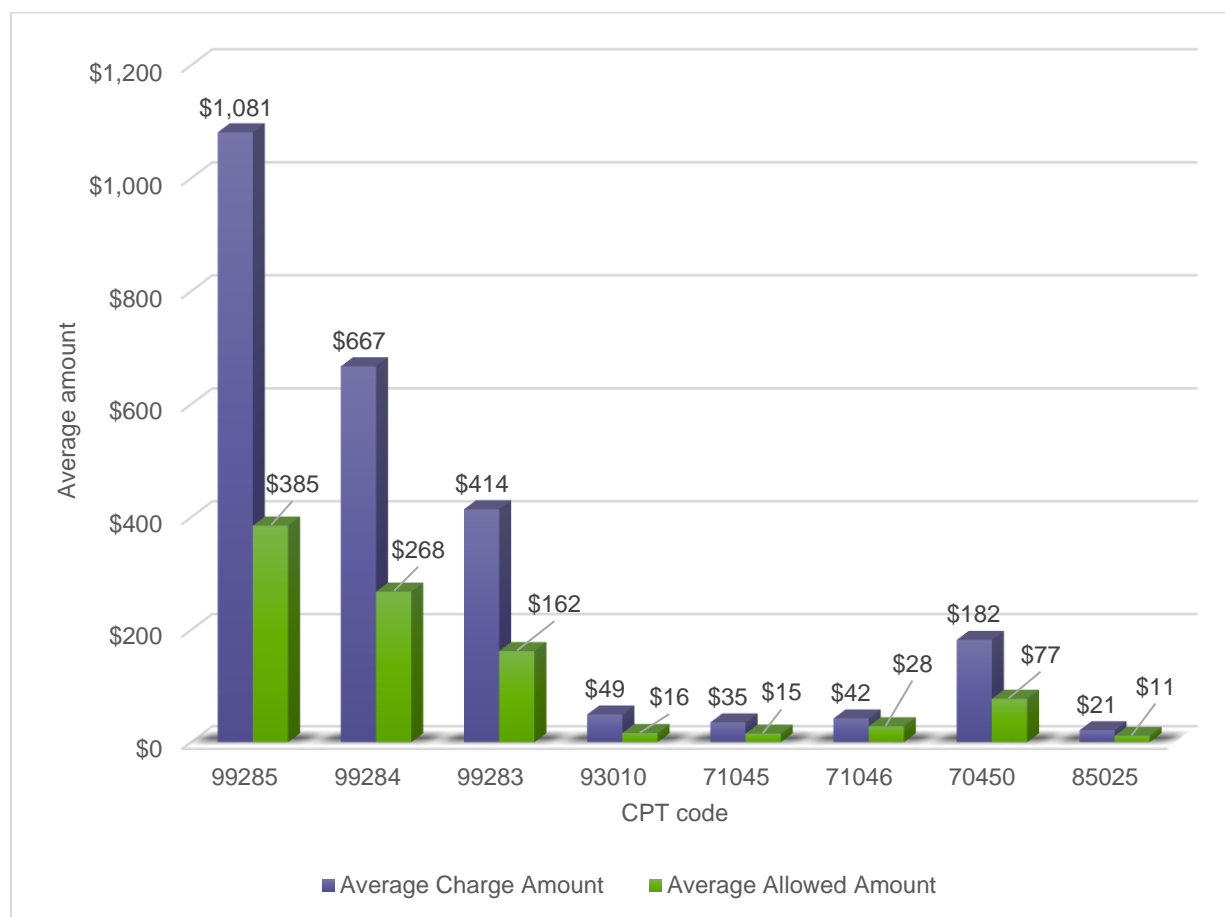


Figure 33. Distribution of claim lines with ER usage by procedures for individuals in all age groups, not including E&Ms, 2018

Figure 34 shows average charges and allowed amounts for the most common ER procedure codes in 2018. The charges shown ranged from a high of \$1,081 for CPT 99285 (emergency department visit—high severity—life threatening), to a low of \$21 for CPT 85025 (blood count; complete [CBC], automated). The corresponding allowed amounts were \$385 and \$11, respectively. Chest X-rays continued to be within the eight most common procedure codes, even though the coding changed, as CPT 71010 (single-view chest X-ray) and CPT 71020 (two-view chest X-ray) were deleted and replaced with, respectively, CPT 71045 and CPT 71046. The costs of the new codes were similar to those of their deleted counterparts.



CPT Code	Description	CPT Code	Description
99285	Emergency department visit – high severity – life threatening	71045	Single-view chest X-ray
99284	Emergency department visit – high/urgent severity	71046	Two-view chest X-ray
99283	Emergency department visit – moderate severity	70450	CT head/brain w/o contrast material
93010	Electrocardiogram	85025	Blood count; complete (CBC), automated

Figure 34. Average charges and allowed amounts for the most common procedures performed in ERs, 2018

FH Medical Price Index

Professional E&M

The professional E&M indices include CPT codes in the AMA CPT code category Evaluation and Management Services for procedures typically performed in a professional setting as opposed to a hospital setting. This includes office visits such as CPT 99213 and consultations such as CPT 99241.

From November 2018 to November 2019, the professional E&M charge amount index continued the upward trend seen since the base period of May 2012 (figure 35). The index increased from 1.28 in November 2018 to 1.34 in November 2019, a five percent increase.

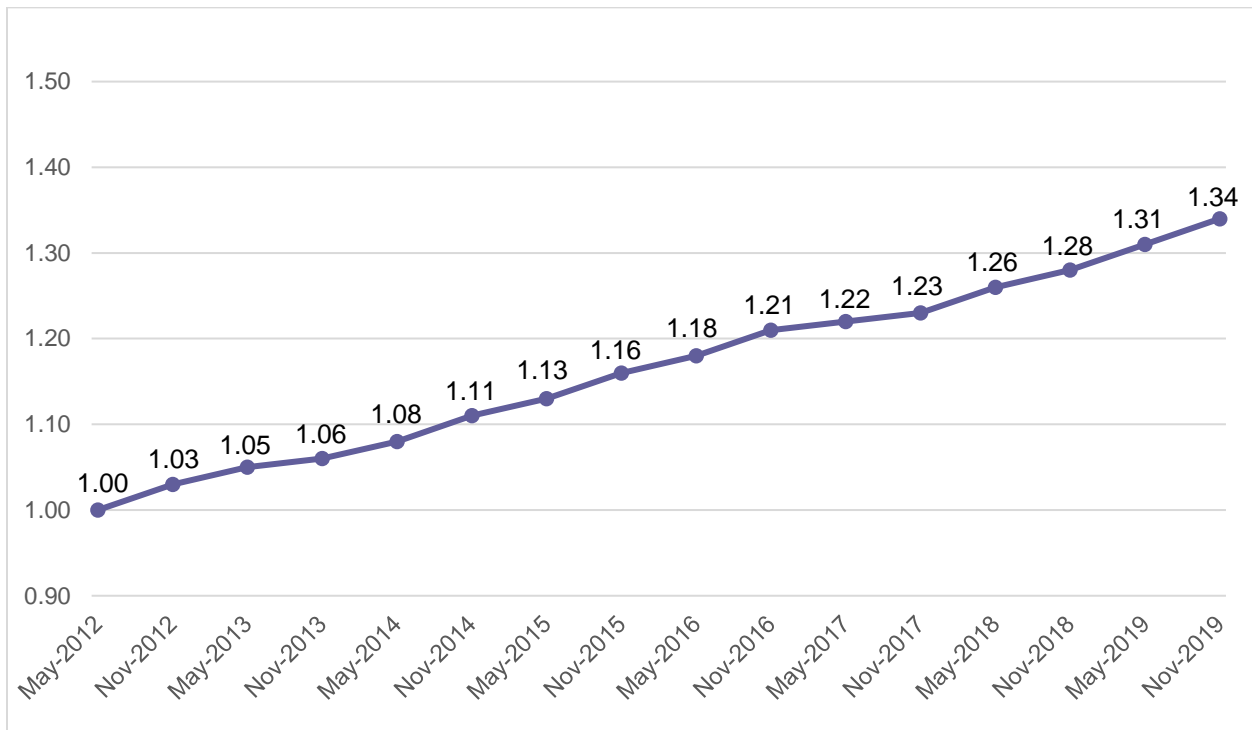


Figure 35. Professional E&M charge amount index

Similar growth occurred in the professional E&M allowed amount index, which changed from 1.27 in November 2018 to 1.33 in November 2019, a five percent increase (figure 36).

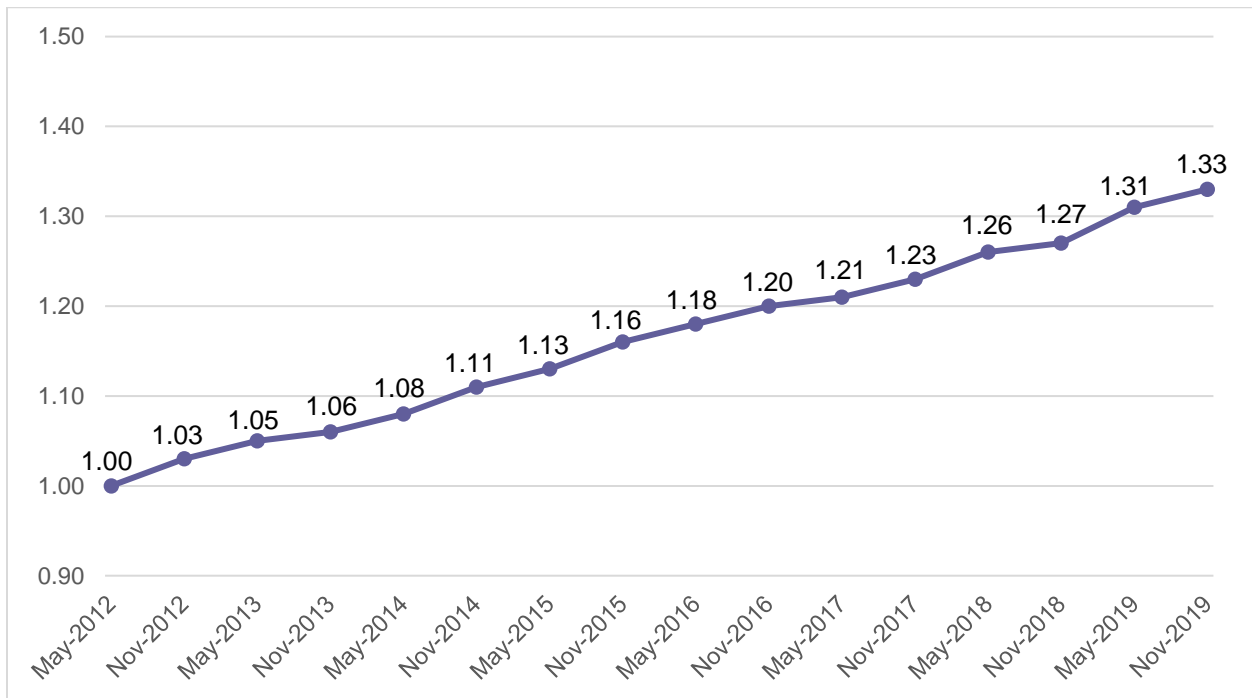


Figure 36. Professional E&M allowed amount index

Hospital E&M

The hospital E&M procedure indices include CPT codes in the AMA CPT code category Evaluation and Management Services for procedures typically performed in a hospital setting, such as CPT 99223, initial hospital care per day, 70 minutes, or CPT 99283, emergency department visit of moderate severity. These indices exclude E&Ms typically performed in a professional setting, such as common office visits. Facility fees are also not included.

The growth trend since May 2012 continued in the hospital E&M indices from November 2018 to November 2019. The hospital E&M charge amount index increased from 1.40 in November 2018 to 1.52 in November 2019, a nine percent increase (figure 37).

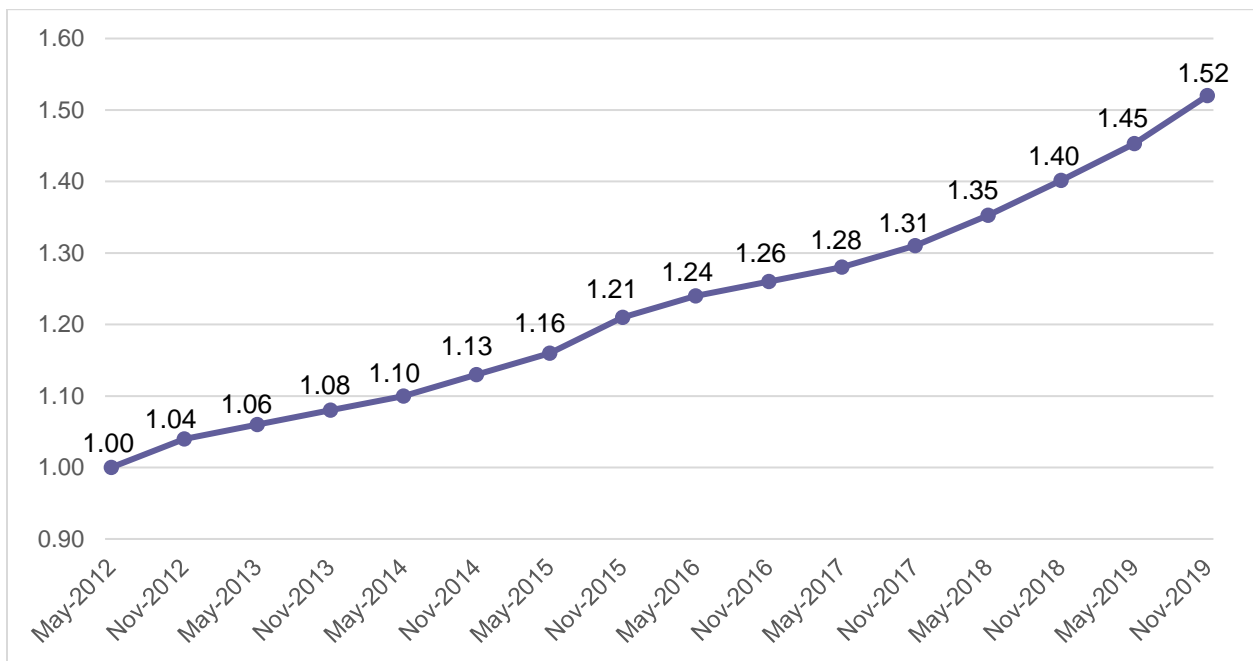


Figure 37. Hospital E&M charge amount index

The hospital E&M allowed amount index increased by seven percent, from 1.37 in November 2018 to 1.46 in November 2019 (figure 38).

Of the six categories, hospital E&Ms had the greatest percent increase in charge amount index from November 2018 to November 2019 and the second greatest percent increase in allowed amount index in the same time period. As reported in previous editions, hospital E&Ms also had the greatest percent increase in charges from May 2012 to May 2017 and from November 2017 to November 2018.

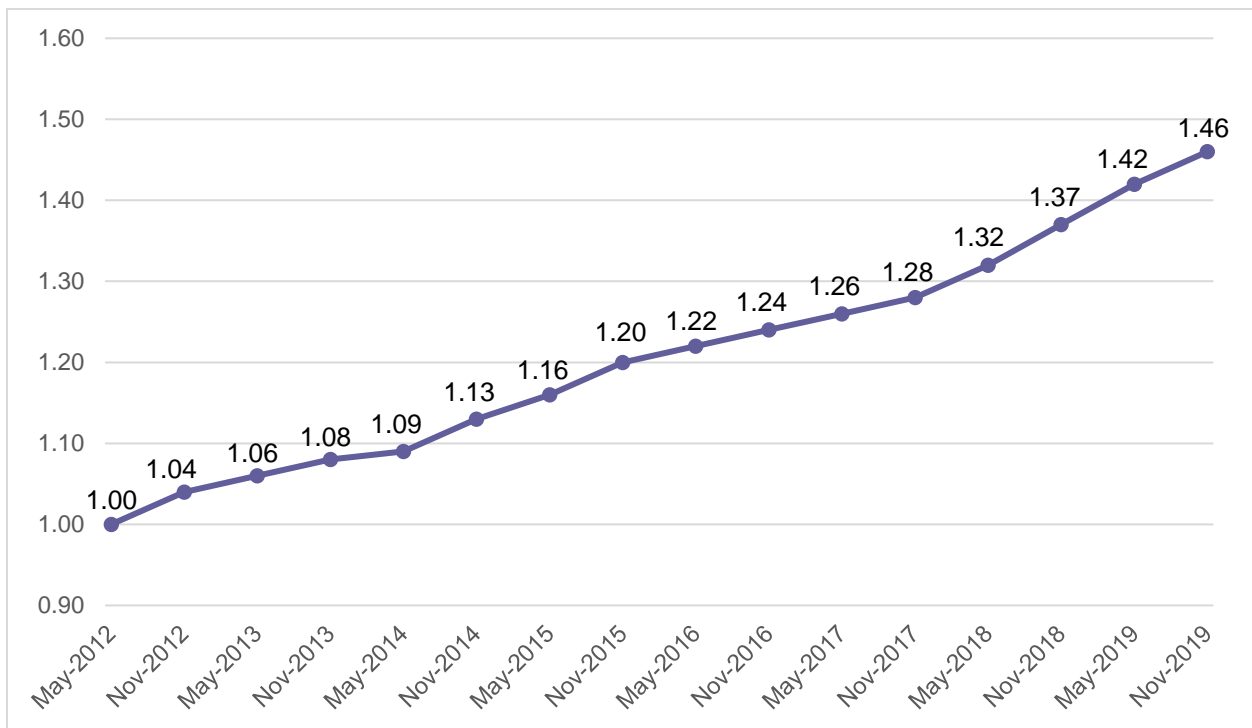


Figure 38. Hospital E&M allowed amount index

Medicine

The medicine indices include all procedures that are not E&Ms, meet the frequency criterion of one million or more and are found in the CPT code ranges from CPT 90281 to CPT 99199 and CPT 99500 to CPT 99607. They include services such as immunizations, psychiatry services, dialysis procedures, and allergy and immunology procedures.

Steady growth continued in the medicine indices from November 2018 to November 2019. The medicine charge amount index grew from 1.18 in November 2018 to 1.25 in November 2019, a six percent increase (figure 39).

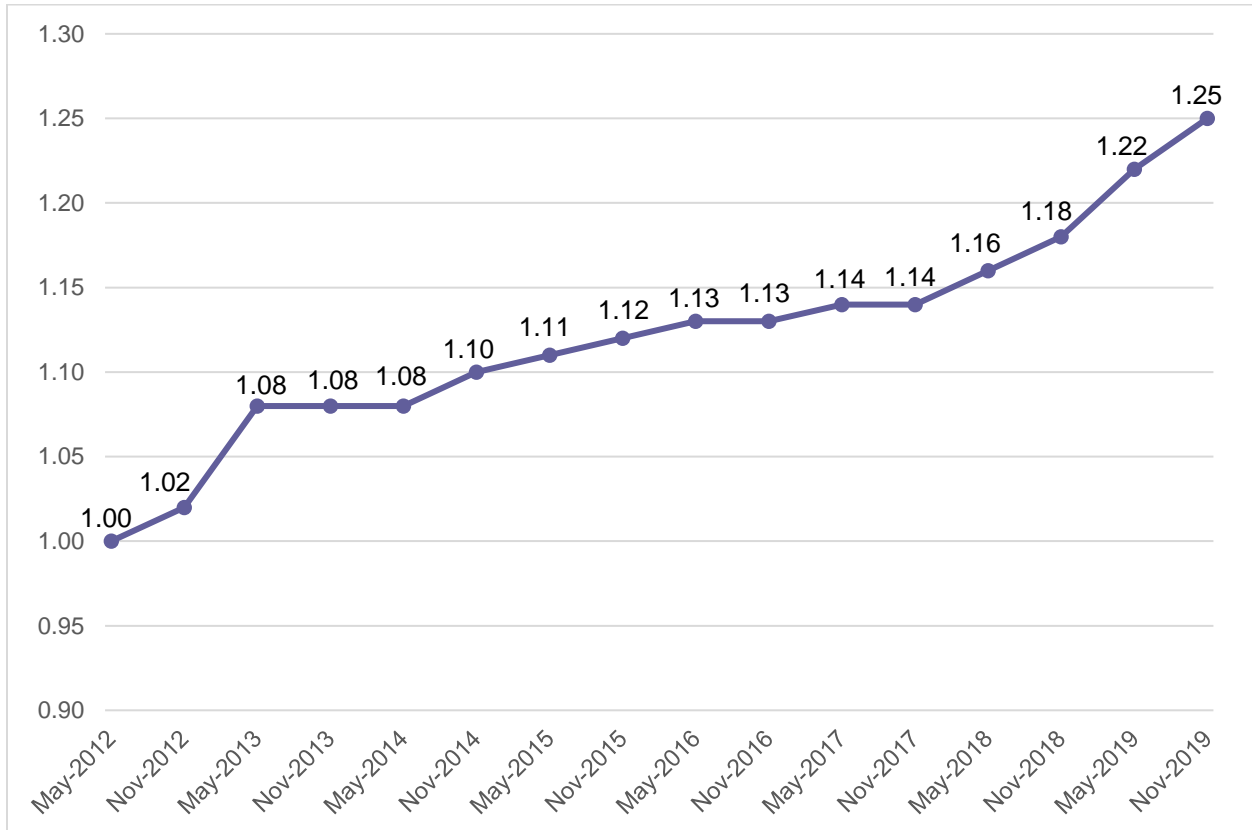


Figure 39. Medicine charge amount index

The medicine allowed amount index changed from 1.24 in November 2018 to 1.29 in November 2019, a four percent increase (figure 40).

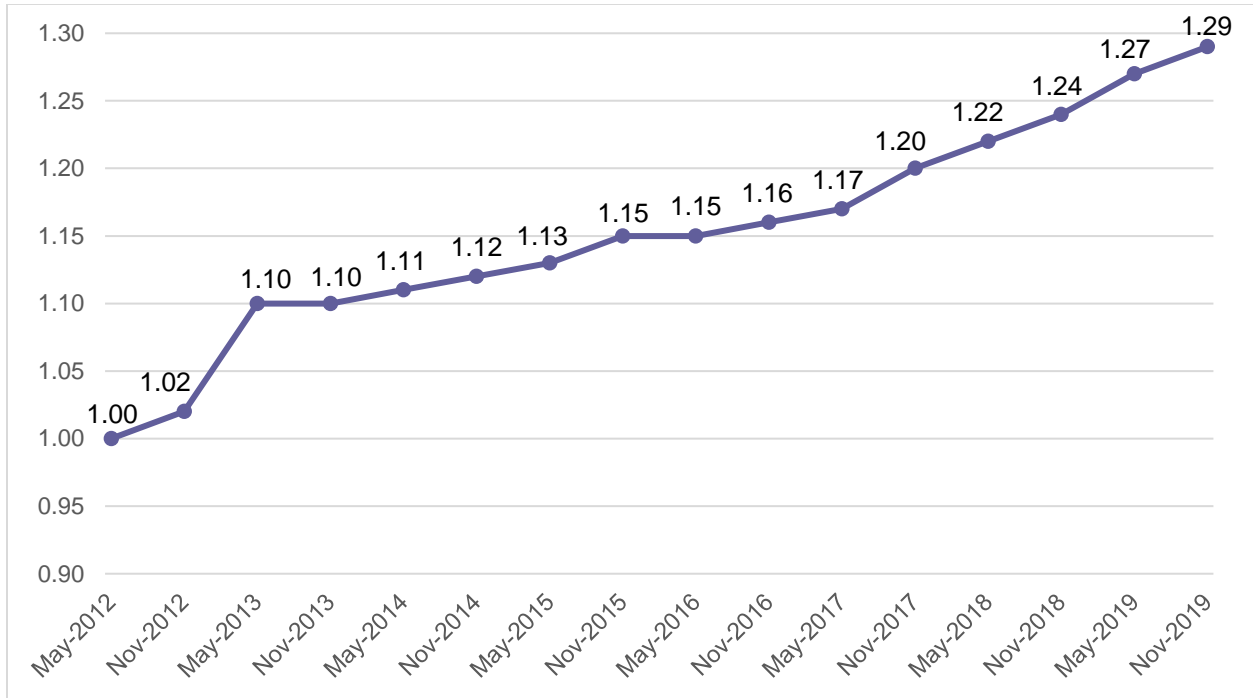


Figure 40. Medicine allowed amount index

Surgery

The surgery indices include codes typically found in the surgical portion of the CPT code book, such as CPT 17003, which is a destruction of a premalignant lesion, and CPT 43239, which is a biopsy during an endoscopy. These are procedures for which the physician would bill; facility fees, if any, are not reflected in the surgery indices.

From November 2018 to November 2019, the surgery charge amount index grew seven percent from 1.08 to 1.16 (figure 41).

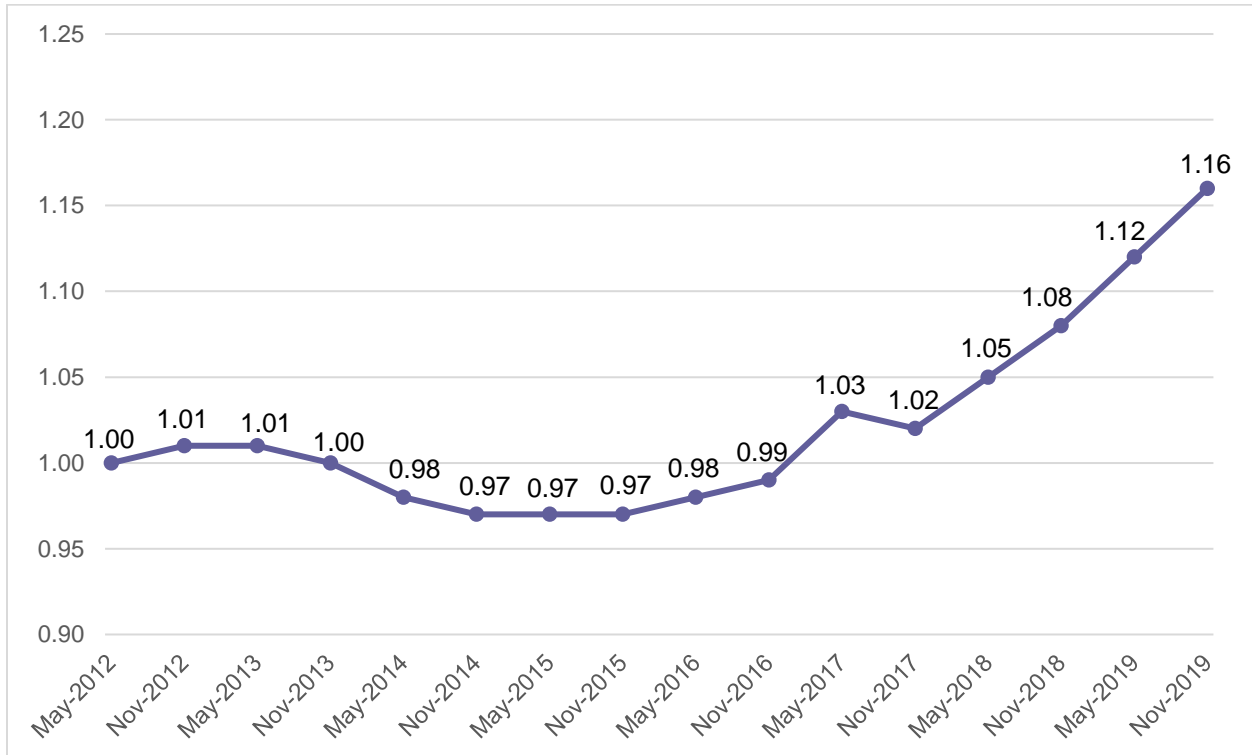


Figure 41. Surgery charge amount index

The surgery allowed amount index increased nine percent, from 1.09 in November 2018 to 1.19 in November 2019 (figure 42).

Of the six categories, surgery had the greatest percent increase in allowed amount index from November 2018 to November 2019 and the second greatest percent increase in charge amount index.

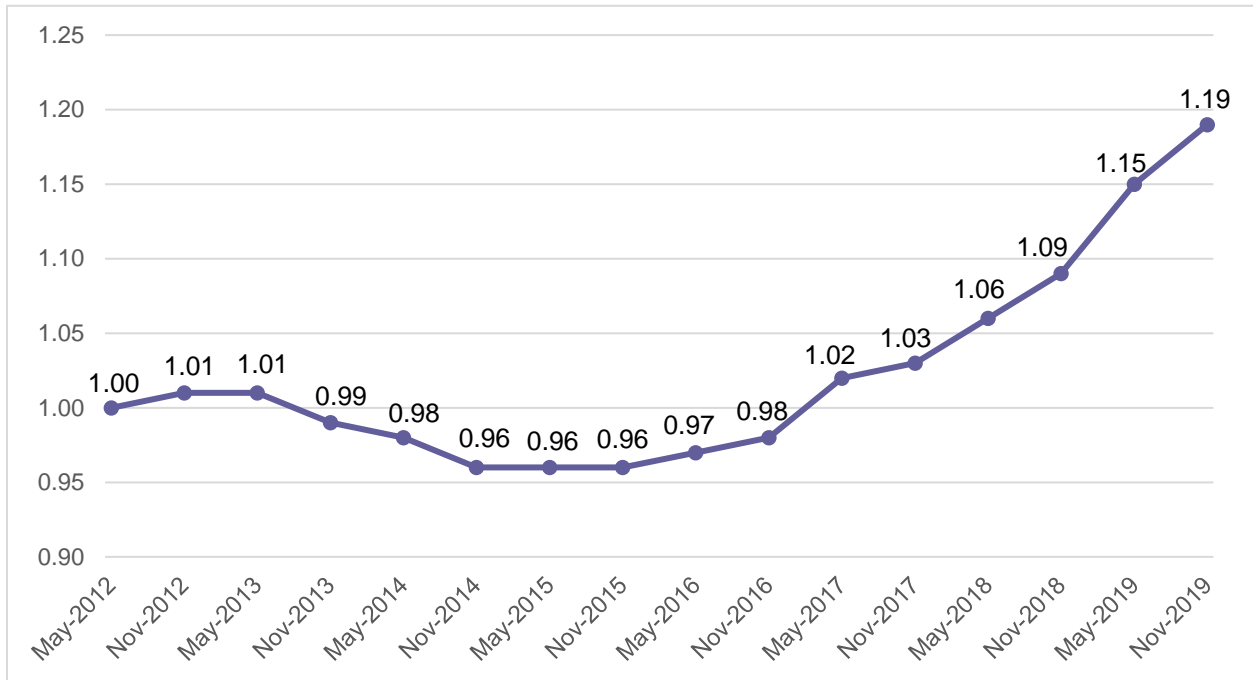


Figure 42. Surgery allowed amount index

Pathology and Laboratory

The pathology and laboratory indices include the CPT code range 80047 through 89398, which identifies such procedures as organ- or disease-oriented panels, drug testing, therapeutic transfusion medicine, microbiology, anatomic pathology (postmortem), cytopathology and in vivo laboratory procedures. Technical (i.e., equipment) and professional costs are included, but not facility fees.

Growth continued in the pathology and laboratory indices. The charge amount index increased three percent from 1.14 in November 2018 to 1.17 in November 2019 (figure 43).

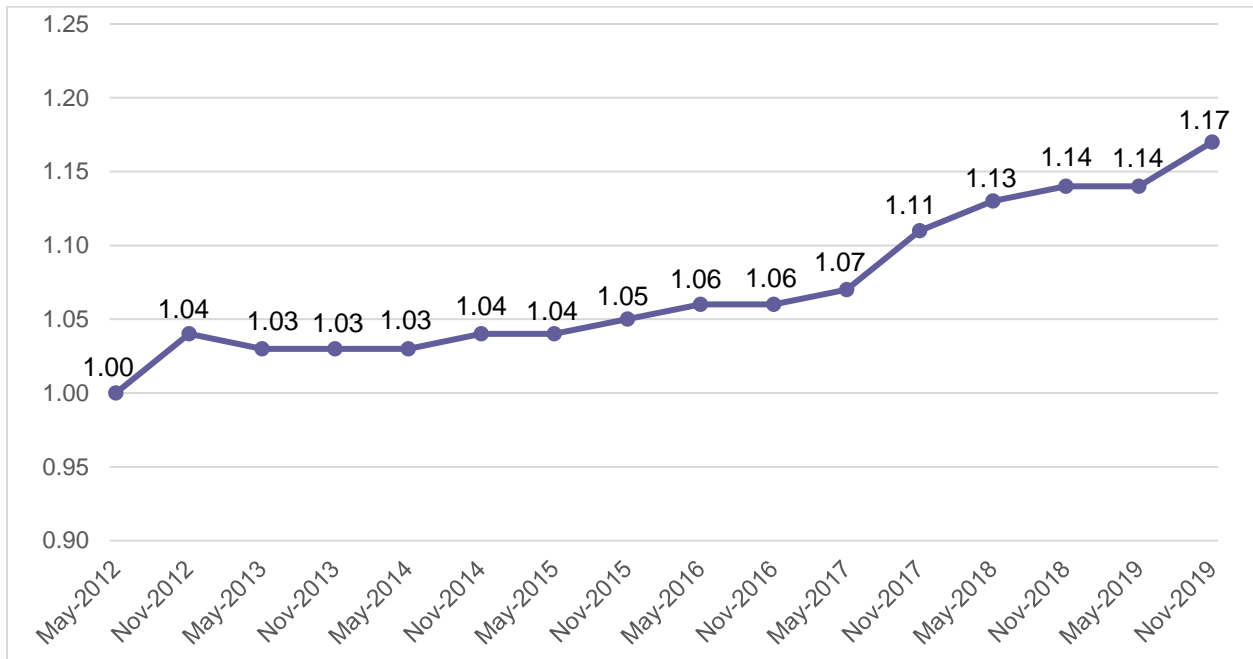


Figure 43. Pathology and laboratory charge amount index

The pathology and laboratory allowed amount index increased one percent, from 1.13 in November 2018 to 1.14 in November 2019 (figure 44). Pathology and laboratory, along with radiology, had the lowest rate of growth of all six categories in the allowed amount indices for this time period.

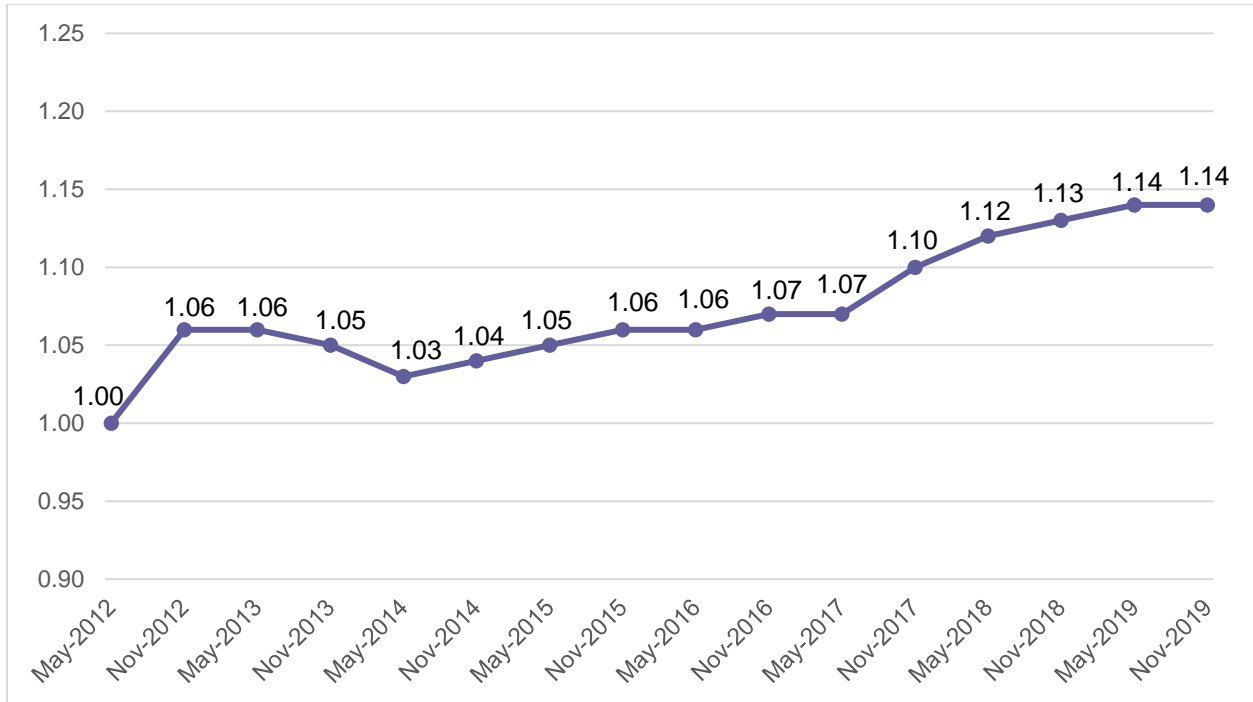


Figure 44. Pathology and laboratory allowed amount index

Radiology

The radiology indices include CPT codes from 70010 to 79999, representing a variety of imaging techniques to diagnose or treat diseases. X-rays, radiographs, ultrasounds, positron emission tomography (PET), CT and nuclear medicine are included in this category. Both technical and professional components are included, but not facility fees.

The radiology charge amount index decreased one percent from 1.10 in November 2018 to 1.09 in November 2019 (figure 45). This was the only decrease in this time period for either charge or allowed amount indices. It was a distinct change from the increase of six percent from November 2017 to November 2018, which was likely due in part to the introduction of new codes in 2018.

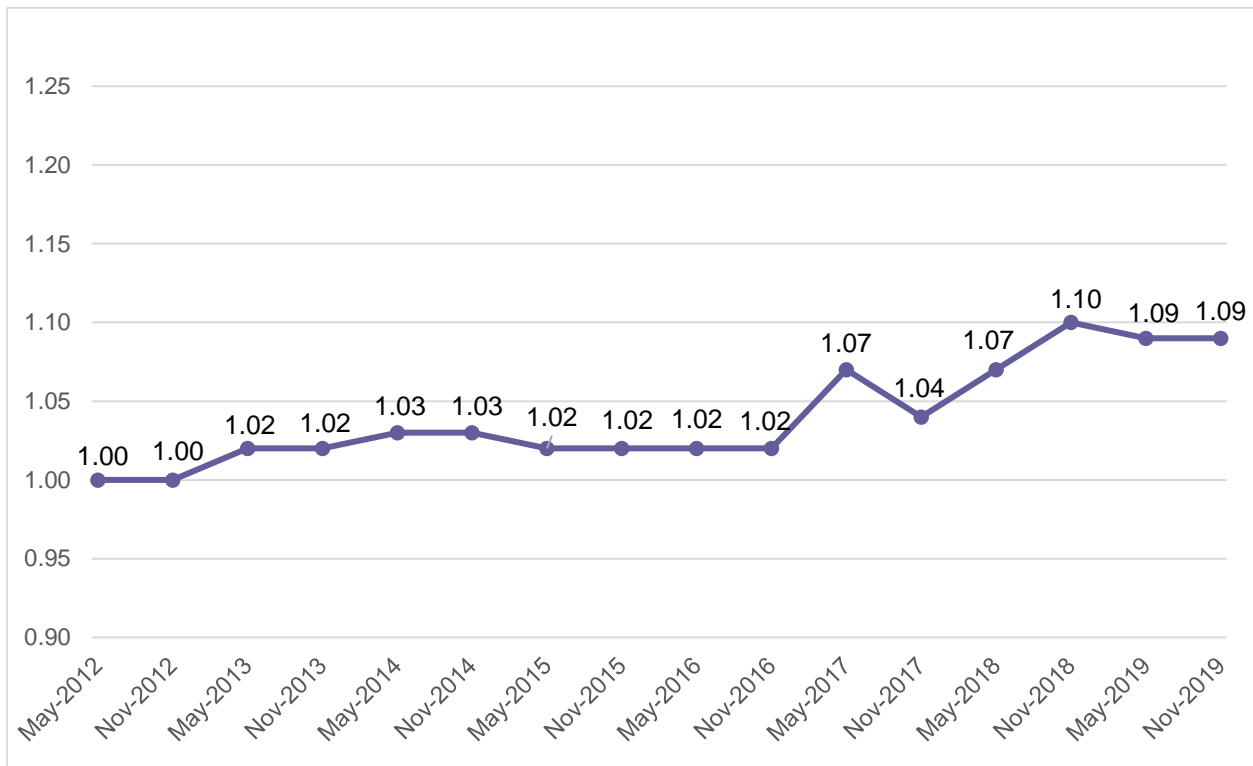


Figure 45. Radiology charge amount index

The radiology allowed amount index increased one percent from 1.13 in November 2018 to 1.14 in November 2019 (figure 46). This marked a change from the larger increase of seven percent from November 2017 to November 2018.

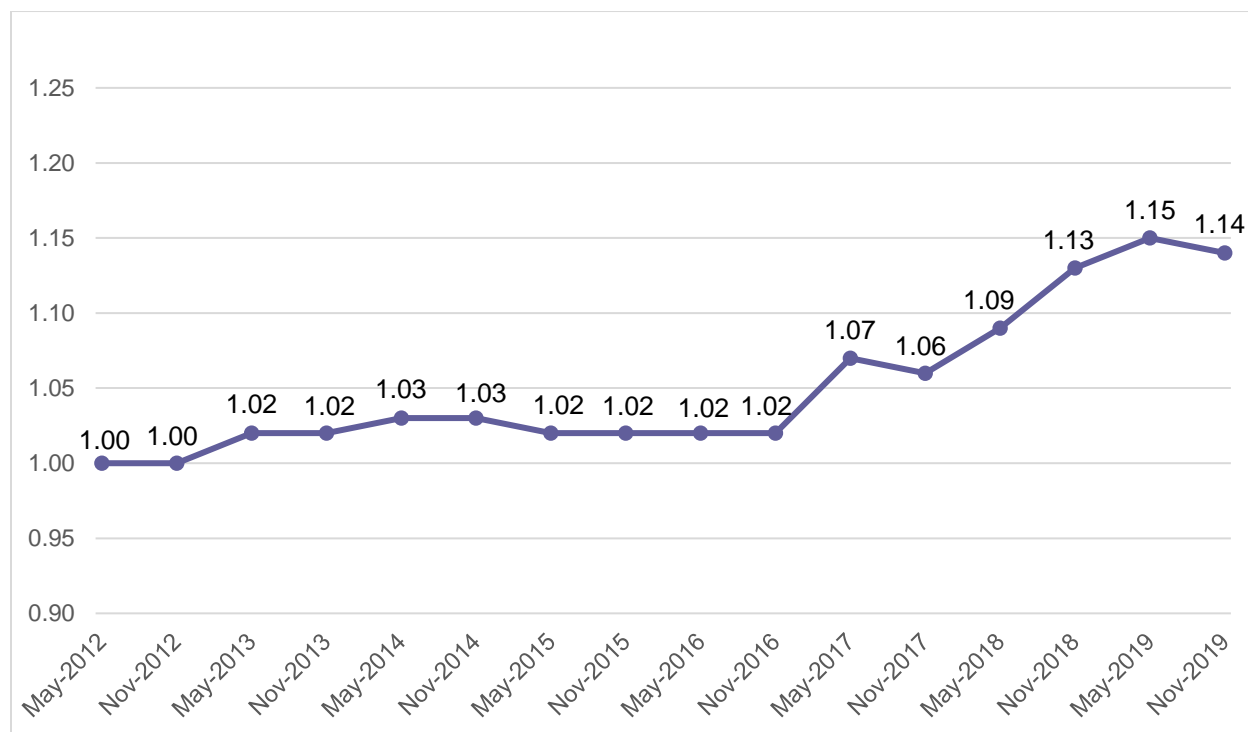


Figure 46. Radiology allowed amount index

Conclusion

This year’s edition of FH Healthcare Indicators presents evidence of slowing growth in utilization across all the places of service studied for growth in utilization. For retail clinics and telehealth, there was growth in 2013-2018, but at a slower rate compared to 2012-2017. For urgent care centers, ASCs and ERs, there was growth in 2009-2018, but at a slower rate compared to 2008-2017. Three places of service—urgent care centers, ASCs and ERs—showed a decrease in utilization from 2017 to 2018; two—retail clinics and telehealth—showed a rise in utilization in that period.

Among the places of service studied, ERs continued to hold the highest percentage of medical claim lines in 2018, with 2.22 percent of all medical claim lines nationally. The comparable percentages for the other places of service were 1.06 percent for urgent care centers, 0.80 percent for ASCs, 0.12 percent for telehealth and 0.04 percent for retail clinics.

As in previous editions, patterns of utilization studied in this year’s edition typically differed across states and in urban and rural areas, and age distribution differed among places of service. Claim lines were more likely to be submitted for women than men in every adult age group in every place of service studied. Places of service varied in their most common diagnoses and procedures, and in their charge amounts and allowed amounts for their most common procedure codes. There also were differences from one year to another. For example, sprains, strains, breaks and fractures fell from 3rd place in 2017 among most common diagnostic categories in urgent care centers to 10th place in 2018. But there were

some similarities from year to year, as well. In 2018, as in 2017, Minnesota was the number one state for claim lines with retail clinic usage as a percentage of all medical claim lines by state.

This year's edition of FH Medical Price Index shows continued growth of charge amounts from November 2018 to November 2019 in every professional procedure category except radiology. The radiology charge amount index decreased one percent, the only decrease in either charge amount or allowed amount indices. In every category (professional E&M, hospital E&M, medicine, surgery, pathology and laboratory, and radiology), allowed amounts grew. Of the six categories, hospital E&Ms had the greatest percent increase in charge amount index, nine percent. Surgery had the greatest percent increase in allowed amount index, nine percent. The pathology and laboratory, and radiology, allowed amount indices had the lowest percent increases in allowed amount index, each one percent.

Because of the importance of the healthcare sector to the US economy and the lives of Americans, understanding the trends and shifts in that sector is vital. By issuing this new edition of FH Healthcare Indicators and FH Medical Price Index, FAIR Health intends to provide current intelligence that can inform decision making by stakeholders throughout the healthcare sector, including payors, providers, government officials, policy makers and others. As part of its mission, FAIR Health will continue to issue these reports annually. In addition, FAIR Health makes available customized indicators and indices that offer specific data subsets (e.g., based on clinical category, geographic region, time period) of particular interest to stakeholders. Contact FAIR Health at info@fairhealth.org or 855-301-3247 to learn more about such customized studies.

About FAIR Health

FAIR Health is a national, independent nonprofit organization dedicated to bringing transparency to healthcare costs and health insurance information through data products, consumer resources and health systems research support. FAIR Health qualifies as a public charity under section 501(c)(3) of the tax code. FAIR Health possesses the nation's largest collection of private healthcare claims data, which includes over 30 billion claim lines contributed by payors and administrators who insure or process claims for private insurance plans covering more than 150 million individuals. FAIR Health licenses its privately billed data and data products—including benchmark modules, data visualizations, custom analytics and market indices—to commercial insurers and self-insurers, employers, providers, hospitals and healthcare systems, government agencies, researchers and others. Certified by the Centers for Medicare & Medicaid Services (CMS) as a national Qualified Entity, FAIR Health also receives data representing the experience of all individuals enrolled in traditional Medicare Parts A, B and D; FAIR Health houses data on Medicare Advantage enrollees in its private claims data repository. FAIR Health can produce insightful analytic reports and data products based on combined Medicare and commercial claims data for government, providers, payors and other authorized users. FAIR Health's free, award-winning, national consumer websites are fairhealthconsumer.org and fairhealthconsumidor.org. For more information on FAIR Health, visit fairhealth.org.

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