

More New and Existing Patient Visits Coded at Level-of-Service Four After Billing Code Changes Took Effect in 2021

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Key Findings:

- For new patients between December 2019 and June 2023, the proportion of new patient office visits coded at level-of-service (LOS) 4 increased the most, while visits coded at LOS 2 decreased the most.
- The proportion of established patient office visits coded at LOS 4 has increased steadily since 2017, and that trend continued after the coding changes in 2021.

Based on the care provided in an office visit, a physician or other qualified healthcare provider uses evaluation and management (E/M) coding, also known as level of service (LOS), for reimbursement.¹ A higher level of service means greater reimbursement. As of January 1, 2021, criteria for E/M coding changed across office visits to decrease documentation burden, simplifying criteria for medical decision making and enabling physicians to code based on visit time or degree of medical decision making required.² In addition to the simplification and flexibility added, LOS 1 was removed as an available billing code for new patient visits.³ To determine how these coding criteria changes have influenced the proportion of office visits coded at each LOS, we reviewed 368 million office visits that occurred between January 1, 2017, and June 30, 2023.

For new patient visits, we found that, after the implementation of E/M changes on January 1, 2021, there was a decrease in the percentage of visits coded with LOS 2, from 13.1% in December 2020 to 4.5% in June 2023. The greatest percentage increase since the E/M coding changes was in visits coded at LOS 4, which increased from 33.3% to 45.1% of new patient office visits over the same period.

New Patient Level-of-Service Code Proportions

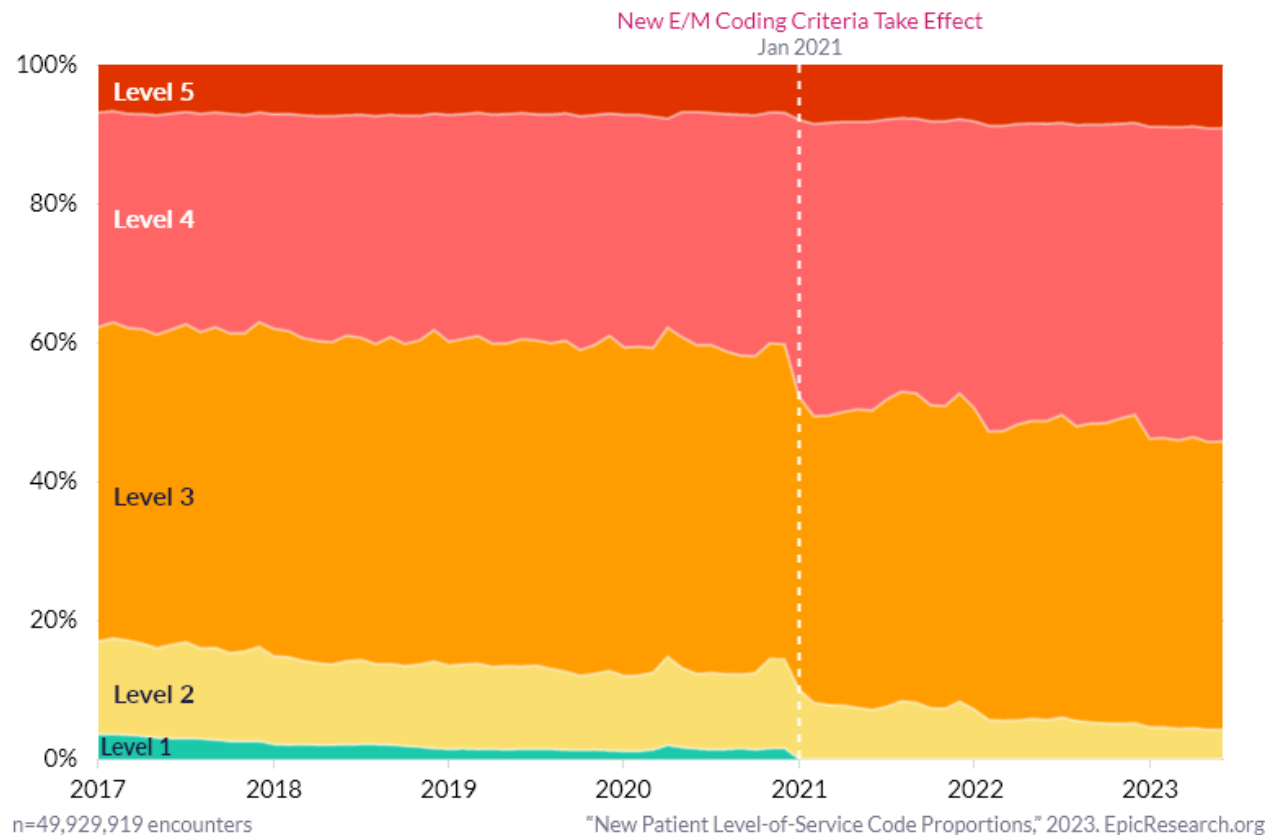


Figure 1. Proportion of visits with each level-of-service code for new patient office visits.

For established patients, we found there has been a steady increase in higher LOS code use since 2017, as shown in Figure 2. LOS 4 had the greatest change, going from 39.3% in January 2017 to 47.0% in December 2020 and then up to more than half of visits (50.3%) in June 2023. LOS 3 had the greatest decline in use, going from 48.3% of established patient visits in January 2017 to 42.9% in December 2020 and further decreasing to 39.7% in June 2023.

Established Patient Level-of-Service Code Proportions

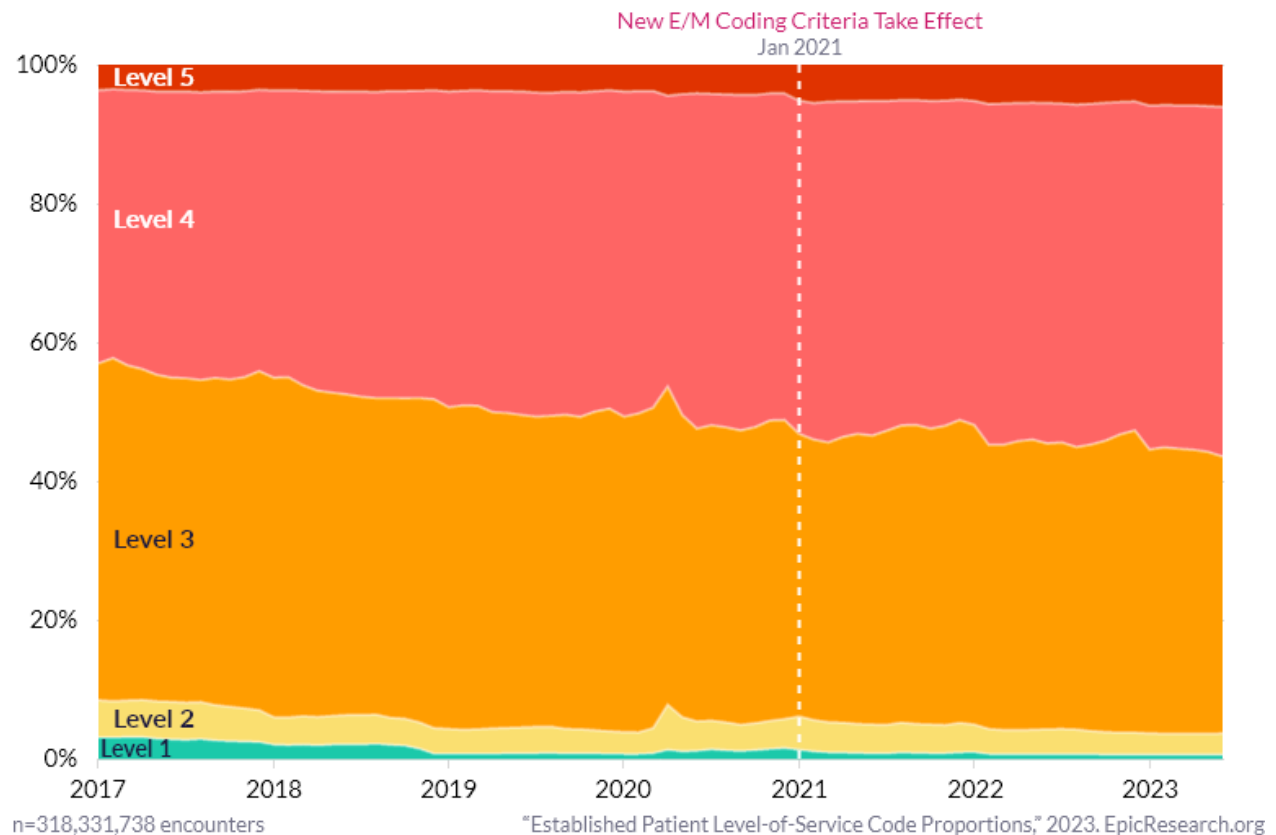


Figure 2. Proportion of visits with each level-of-service code for established patient office visits.

These data come from Cosmos, a HIPAA-defined Limited Data Set of more than 220 million patients from 219 Epic organizations including 1,260 hospitals and more than 27,000 clinics, serving patients in all 50 states and Lebanon. This study was completed by two teams that worked independently, each composed of a clinician and research scientists. The two teams came to similar conclusions. Graphics by Brian Olson.

References

1. Evaluation and management coding, E/M codes. (n.d.). AAPC. <https://www.aapc.com/resources/what-are-e-m-codes>
2. CPT® evaluation and management. (2023, May 12). American Medical Association. <https://www.ama-assn.org/practice-management/cpt/cpt-evaluation-and-management>
3. Evaluation and management (E/M) code changes 2021. (2021, January 15). AAPC. <https://www.aapc.com/resources/evaluation-management-coding-changes-2021>

Data Definitions

Term	Definition
Study period	1/1/2017-6/30/2023
Study population	Outpatient visits with an encounter type of "Office Visit" and a level of service billing code (excluding telehealth billing codes 99441-99443).
Level of service billing code	For new patients: • 99201-99205 For returning patients

• 99211-99215	
LOS 1	Encounters billed with a level-of-service code 99201 or 99211.
LOS 2	Encounters billed with a level-of-service code 99202 or 99212.
LOS 3	Encounters billed with a level-of-service code 99203 or 99213.
LOS 4	Encounters billed with a level-of-service code 99204 or 99214.
LOS 5	Encounters billed with a level-of-service code 99205 or 99215.

Table 1: New Patient Level-of-Service Code Proportions

Month Start Date	LOS 1 New Patient	LOS 2 New Patient	LOS 3 New Patient	LOS 4 New Patient	LOS 5 New Patient
2017-01-01	3.5%	13.7%	45.0%	30.9%	6.9%
2017-02-01	3.6%	14.0%	45.3%	30.4%	6.7%
2017-03-01	3.4%	13.9%	44.7%	30.8%	7.0%
2017-04-01	3.3%	13.6%	45.0%	31.0%	7.1%
2017-05-01	3.0%	13.2%	44.9%	31.6%	7.3%
2017-06-01	3.0%	13.7%	45.2%	31.1%	7.0%
2017-07-01	3.0%	14.1%	45.5%	30.6%	6.8%
2017-08-01	2.9%	13.3%	45.3%	31.4%	7.1%
2017-09-01	2.7%	13.5%	46.0%	30.9%	6.9%
2017-10-01	2.5%	13.0%	45.8%	31.6%	7.0%
2017-11-01	2.6%	13.2%	45.6%	31.4%	7.2%
2017-12-01	2.5%	13.9%	46.5%	30.2%	6.9%
2018-01-01	2.1%	13.0%	46.9%	30.9%	7.1%
2018-02-01	2.0%	12.9%	46.7%	31.2%	7.1%
2018-03-01	2.1%	12.3%	46.2%	32.1%	7.3%
2018-04-01	2.0%	12.1%	46.2%	32.4%	7.4%
2018-05-01	2.0%	11.9%	46.1%	32.5%	7.4%
2018-06-01	2.1%	12.3%	46.6%	31.7%	7.3%
2018-07-01	2.1%	12.4%	46.1%	32.1%	7.2%
2018-08-01	2.1%	11.9%	45.8%	32.8%	7.4%
2018-09-01	2.0%	11.9%	46.8%	32.0%	7.2%
2018-10-01	1.9%	11.8%	46.2%	32.8%	7.4%
2018-11-01	1.7%	12.2%	46.4%	32.3%	7.4%
2018-12-01	1.5%	12.8%	47.5%	31.1%	7.0%
2019-01-01	1.4%	12.3%	46.4%	32.6%	7.3%
2019-02-01	1.5%	12.4%	46.7%	32.4%	7.1%
2019-03-01	1.4%	12.6%	46.9%	32.1%	6.9%
2019-04-01	1.4%	12.1%	46.3%	33.0%	7.2%
2019-05-01	1.3%	12.3%	46.2%	33.0%	7.1%
2019-06-01	1.4%	12.2%	46.9%	32.6%	6.9%

2019-07-01	1.4%	12.3%	46.6%	32.6%	7.1%
2019-08-01	1.4%	11.8%	46.6%	32.9%	7.2%
2019-09-01	1.3%	11.6%	47.4%	32.8%	7.0%
2019-10-01	1.2%	11.0%	46.6%	33.6%	7.4%
2019-11-01	1.3%	11.3%	47.1%	33.1%	7.3%
2019-12-01	1.2%	11.8%	48.0%	32.0%	7.0%
2020-01-01	1.1%	11.1%	47.1%	33.5%	7.2%
2020-02-01	1.1%	11.2%	47.1%	33.4%	7.2%
2020-03-01	1.3%	11.4%	46.5%	33.3%	7.5%
2020-04-01	2.0%	13.0%	47.1%	30.1%	7.8%
2020-05-01	1.6%	11.7%	47.4%	32.5%	6.8%
2020-06-01	1.5%	11.1%	47.1%	33.6%	6.8%
2020-07-01	1.3%	11.3%	47.0%	33.4%	7.0%
2020-08-01	1.4%	11.1%	46.2%	34.2%	7.1%
2020-09-01	1.5%	10.9%	45.7%	34.6%	7.2%
2020-10-01	1.4%	11.3%	45.4%	34.7%	7.3%
2020-11-01	1.5%	13.3%	45.1%	33.3%	6.9%
2020-12-01	1.5%	13.1%	45.1%	33.3%	6.9%
2021-01-01	0.0%	10.2%	41.9%	39.9%	7.9%
2021-02-01	0.0%	8.4%	41.0%	42.1%	8.5%
2021-03-01	0.0%	8.0%	41.4%	42.1%	8.4%
2021-04-01	0.0%	8.0%	42.1%	41.7%	8.2%
2021-05-01	0.0%	7.6%	42.8%	41.4%	8.2%
2021-06-01	0.0%	7.3%	42.8%	41.7%	8.2%
2021-07-01	0.0%	7.8%	44.0%	40.3%	7.9%
2021-08-01	0.0%	8.6%	44.4%	39.4%	7.7%
2021-09-01	0.0%	8.4%	44.3%	39.5%	7.8%
2021-10-01	0.0%	7.6%	43.4%	40.9%	8.1%
2021-11-01	0.0%	7.5%	43.4%	41.0%	8.2%
2021-12-01	0.0%	8.5%	44.1%	39.5%	7.9%
2022-01-01	0.0%	7.4%	43.2%	41.3%	8.1%
2022-02-01	0.0%	5.9%	41.3%	44.0%	8.8%
2022-03-01	0.0%	5.8%	41.5%	44.0%	8.8%
2022-04-01	0.0%	5.9%	42.4%	43.2%	8.5%
2022-05-01	0.0%	6.0%	42.7%	42.8%	8.5%
2022-06-01	0.0%	5.9%	42.8%	42.8%	8.5%
2022-07-01	0.0%	6.2%	43.4%	42.0%	8.4%
2022-08-01	0.0%	5.7%	42.2%	43.4%	8.7%
2022-09-01	0.0%	5.5%	42.8%	43.0%	8.6%
2022-10-01	0.0%	5.4%	43.0%	43.0%	8.6%
2022-11-01	0.0%	5.3%	43.7%	42.5%	8.5%

2022-12-01	0.0%	5.5%	44.1%	42.0%	8.4%
2023-01-01	0.0%	4.9%	41.3%	44.9%	9.0%
2023-02-01	0.0%	4.8%	41.4%	44.8%	8.9%
2023-03-01	0.0%	4.6%	41.3%	45.1%	9.0%
2023-04-01	0.0%	4.7%	41.7%	44.7%	8.9%
2023-05-01	0.0%	4.5%	41.2%	45.1%	9.2%
2023-06-01	0.0%	4.5%	41.3%	45.1%	9.1%

Table 2: Established Patient Level-of-Service Code Proportions

Month Start Date	LOS 1 Est. Patients	LOS 2 Est. Patients	LOS 3 Est. Patients	LOS 4 Est. Patients	LOS 5 Est. Patients
2017-01-01	3.2%	5.6%	48.3%	39.3%	3.7%
2017-02-01	3.1%	5.5%	49.2%	38.7%	3.5%
2017-03-01	3.2%	5.5%	48.0%	39.6%	3.6%
2017-04-01	3.2%	5.6%	47.4%	40.1%	3.7%
2017-05-01	3.0%	5.6%	46.8%	40.7%	3.9%
2017-06-01	2.9%	5.6%	46.5%	41.2%	3.9%
2017-07-01	2.8%	5.6%	46.5%	41.2%	3.9%
2017-08-01	2.9%	5.6%	46.2%	41.4%	4.0%
2017-09-01	2.7%	5.3%	46.9%	41.2%	3.9%
2017-10-01	2.6%	5.2%	46.9%	41.4%	3.9%
2017-11-01	2.5%	5.0%	47.5%	41.1%	3.8%
2017-12-01	2.5%	4.8%	48.6%	40.5%	3.6%
2018-01-01	2.1%	4.2%	48.7%	41.3%	3.7%
2018-02-01	2.0%	4.2%	48.8%	41.3%	3.7%
2018-03-01	2.1%	4.3%	47.4%	42.4%	3.8%
2018-04-01	2.0%	4.3%	46.8%	43.1%	3.8%
2018-05-01	2.1%	4.3%	46.4%	43.3%	3.9%
2018-06-01	2.1%	4.5%	46.0%	43.6%	3.8%
2018-07-01	2.1%	4.5%	45.7%	43.9%	3.9%
2018-08-01	2.2%	4.4%	45.4%	44.0%	3.9%
2018-09-01	2.1%	4.2%	45.8%	44.2%	3.8%
2018-10-01	1.9%	4.1%	45.9%	44.2%	3.8%
2018-11-01	1.5%	4.0%	46.5%	44.2%	3.7%
2018-12-01	0.8%	3.9%	47.2%	44.5%	3.7%
2019-01-01	0.8%	3.8%	46.1%	45.4%	3.9%
2019-02-01	0.8%	3.7%	46.5%	45.3%	3.7%
2019-03-01	0.8%	3.8%	46.4%	45.4%	3.7%
2019-04-01	0.8%	3.9%	45.4%	46.2%	3.8%
2019-05-01	0.8%	3.9%	45.2%	46.3%	3.8%

2019-06-01	0.9%	3.9%	44.8%	46.5%	3.9%
2019-07-01	0.9%	4.0%	44.5%	46.6%	4.0%
2019-08-01	0.9%	4.0%	44.6%	46.5%	4.0%
2019-09-01	0.8%	3.7%	45.1%	46.5%	3.9%
2019-10-01	0.8%	3.7%	44.8%	46.7%	4.0%
2019-11-01	0.8%	3.6%	45.7%	46.1%	3.8%
2019-12-01	0.8%	3.5%	46.2%	45.8%	3.7%
2020-01-01	0.7%	3.4%	45.2%	46.8%	3.9%
2020-02-01	0.7%	3.4%	45.7%	46.4%	3.8%
2020-03-01	0.9%	3.8%	46.0%	45.6%	3.8%
2020-04-01	1.3%	6.7%	45.6%	41.8%	4.5%
2020-05-01	1.1%	5.1%	43.3%	46.1%	4.3%
2020-06-01	1.2%	4.5%	42.0%	48.2%	4.1%
2020-07-01	1.4%	4.4%	42.3%	47.7%	4.2%
2020-08-01	1.3%	4.2%	42.3%	47.9%	4.3%
2020-09-01	1.2%	4.0%	42.2%	48.3%	4.3%
2020-10-01	1.3%	4.1%	42.5%	47.8%	4.4%
2020-11-01	1.4%	4.3%	43.1%	47.0%	4.1%
2020-12-01	1.6%	4.4%	42.9%	47.0%	4.1%
2021-01-01	1.4%	5.0%	40.5%	47.9%	5.2%
2021-02-01	1.1%	4.8%	40.2%	48.4%	5.5%
2021-03-01	1.0%	4.6%	40.1%	49.0%	5.3%
2021-04-01	0.9%	4.6%	40.9%	48.3%	5.3%
2021-05-01	0.9%	4.4%	41.6%	47.9%	5.3%
2021-06-01	0.8%	4.4%	41.4%	48.2%	5.2%
2021-07-01	0.8%	4.4%	42.1%	47.5%	5.2%
2021-08-01	1.0%	4.5%	42.6%	46.8%	5.1%
2021-09-01	0.9%	4.4%	42.9%	46.7%	5.1%
2021-10-01	0.9%	4.4%	42.4%	47.2%	5.2%
2021-11-01	0.9%	4.3%	42.9%	46.8%	5.2%
2021-12-01	1.0%	4.5%	43.4%	46.1%	5.0%
2022-01-01	1.0%	4.2%	43.0%	46.6%	5.2%
2022-02-01	0.8%	3.8%	40.7%	49.0%	5.7%
2022-03-01	0.7%	3.7%	40.8%	49.1%	5.6%
2022-04-01	0.7%	3.7%	41.4%	48.7%	5.5%
2022-05-01	0.7%	3.7%	41.6%	48.5%	5.5%
2022-06-01	0.7%	3.8%	40.9%	49.0%	5.5%
2022-07-01	0.8%	3.8%	41.0%	48.8%	5.6%
2022-08-01	0.8%	3.7%	40.5%	49.3%	5.7%
2022-09-01	0.7%	3.6%	41.1%	49.0%	5.6%
2022-10-01	0.7%	3.5%	41.8%	48.6%	5.5%

2022-11-01	0.7%	3.4%	42.8%	47.8%	5.4%
2022-12-01	0.7%	3.4%	43.3%	47.4%	5.3%
2023-01-01	0.6%	3.3%	40.7%	49.5%	5.9%
2023-02-01	0.6%	3.3%	41.0%	49.3%	5.8%
2023-03-01	0.6%	3.3%	40.8%	49.4%	5.8%
2023-04-01	0.6%	3.3%	40.7%	49.6%	5.8%
2023-05-01	0.7%	3.2%	40.4%	49.7%	6.0%
2023-06-01	0.7%	3.3%	39.7%	50.3%	6.1%