

Supplemental Online Content

Patel SY, Mehrotra A, Huskamp HA, et al. Trends in outpatient care delivery and telemedicine during the COVID-19 pandemic in the US. *JAMA Intern Med*. Published online November 16, 2020. doi: 10.1001/jamainternmed.2020.5928

eAppendix. Supplemental Methods

This supplemental material has been provided by the authors to give readers additional information about their work.

eAppendix, Supplemental Methods

Study Sample Definition

To define our study sample, we employed an enrollee-level inclusion criterion. At the enrollee level, we included individuals with 12 months of continuous medical enrollment in any plan from July 2019 through June 2020 (n=16,740,365).

Classification of Outpatient Visits

We defined outpatient visits using Medicare's expanded list of outpatient Common Procedural Terminology (CPT) codes. We excluded all CPT codes that were specific for clinical settings outside of clinician offices (e.g., emergency departments, hospital inpatient, nursing home or dialysis facility codes). Below is the list of the CPT codes specific to outpatient care that were included in our analysis.

77427	90954	92012	96127	97112	97802	99473	G0438
90785	90955	92012	96130	97155	97803	99483	G0439
90791	90956	92014	96131	97156	97804	99495	G0442
90792	90957	92507	96132	97157	99201	99496	G0443
90832	90958	92508	96133	97158	99202	99497	G0444
90833	90959	92521	96136	97161	99203	99498	G0445
90834	90960	92522	96137	97162	99204	0373T	G0446
90836	90961	92523	96138	97163	99205	S9152	G0447
90837	90962	92524	96139	97164	99211	0362T	G0506
90838	90963	92601	96156	97165	99212	G0108	G0513
90839	90964	92602	96158	97166	99213	G0109	G0514
90840	90965	92603	96159	97167	99214	G0270	G2086
90845	90966	92604	96160	97168	99215	G0296	G2087
90846	90967	94005	96161	97530	99354	G0396	G2088
90847	90968	94664	96164	97535	99355	G0397	97116
90853	90969	96110	96165	97542	99406	G0410	97150
90875	90970	96112	96167	97750	99407	G0420	97151
90951	92002	96113	96168	97755	99441	G0421	97152
90952	92004	96116	96170	97760	99442	G0436	97153
90953	97154	96121	96171	97761	99443	G0437	

Below is the list of CPT codes that are specific to clinical settings outside of clinician offices that were excluded from our analysis.

G0459	99356	99468	99337	99316	99291	99234	99220
G0427	99480	99350	99336	99315	99285	99233	99219
G0426	99479	99349	99335	99310	99284	99232	99218
G0425	99478	99348	99334	99309	99283	99231	99217
G0509	99477	99347	99328	99308	99282	99226	94004
G0508	99476	99345	99327	99307	99281	99225	94003
G0408	99475	99344	99326	99306	99239	99224	94002
G0407	99472	99343	99325	99305	99238	99223	
G0406	99471	99342	99324	99304	99236	99222	
99357	99469	99341	G9685	99292	99235	99221	

Completeness of Outpatient Claims

Some of the most recent data in the OptumLabs database may be underpopulated because of the typical lag, of up to several weeks, between service delivery and the processing and reporting of medical claims. We tested the completeness of claims during each week of our study period by calculating the weekly rates of childbirths per 1,000 female enrollees between the ages of 15 and 44, assuming that the rate of childbirths would remain stable despite the COVID-19 pandemic. The weekly rate of childbirths remained stable from January 1 until June 16, 2020.

Week	Date	Number of Births	%	Number of Women ages 15-44 with 12 months enrollment	Number of childbirths per 1,000 women
1	Jan1-Jan7	3,572	5.3	3,010,677	1.186
2	Jan8-Jan14	2,650	3.9	3,010,677	0.880
3	Jan15-Jan21	2,569	3.8	3,010,677	0.853
4	Jan22-Jan28	2,511	3.7	3,010,677	0.834
5	Jan29-Feb4	2,683	4.0	3,010,677	0.891
6	Feb5-Feb11	2,594	3.9	3,010,677	0.862
7	Feb12-Feb18	2,426	3.6	3,010,677	0.806
8	Feb19-Feb25	2,589	3.8	3,010,677	0.860
9	Feb26-Mar3	2,554	3.8	3,010,677	0.848
10	Mar4-Mar10	2,593	3.9	3,010,677	0.861
11	Mar11-Mar17	2,655	3.9	3,010,677	0.882
12	Mar18-Mar24	2,678	4.0	3,010,677	0.890
13	Mar25-Mar31	2,622	3.9	3,010,677	0.871
14	Apr1-Apr7	2,623	3.9	3,010,677	0.871
15	Apr8-Apr14	2,468	3.7	3,010,677	0.820
16	Apr15-Apr21	2,573	3.8	3,010,677	0.855
17	Apr22-Apr28	2,547	3.8	3,010,677	0.846
18	Apr29-May5	2,639	3.9	3,010,677	0.877
19	May6-May12	2,574	3.8	3,010,677	0.855
20	May13-May19	2,679	4.0	3,010,677	0.890
21	May20-May26	2,496	3.7	3,010,677	0.829
22	May27-Jun2	2,633	3.9	3,010,677	0.875

23	Jun3-Jun9	2,527	3.8	3,010,677	0.839
24	Jun10-Jun16	2,588	3.8	3,010,677	0.860
25	<i>Jun17-Jun23*</i>	<i>2,494</i>	<i>3.7</i>	<i>3,010,677</i>	<i>0.828</i>
26	<i>Jun24-Jun30*</i>	<i>1,900</i>	<i>2.8</i>	<i>3,010,677</i>	<i>0.631</i>

*June 16th marks end of study period. Italicized weeks are not in study period.