

## Supplementary Online Content

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**eTable 1.** Primary Anesthesia *Current Procedural Terminology* Codes and Surgical Body Area Codes

**eTable 2.** Percentage of Patients Who Used Opioids Before Surgery by Surgical Service and Percentage of Each Type of Opioid Used

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

**eTable 1.** Primary Anesthesia *Current Procedural Terminology* Codes and Surgical Body Area Codes

<b>Primary Anesthesia CPT Subgroups</b>	<b>Surgical Service Body Area</b>
00100 to 00299	Head
00300 to 00399	Neck
00400 to 00499	Thorax
00500 to 00599	Intrathoracic
00600 to 00699	Spine/Spinal Cord
00700 to 00799	Upper Abdomen
00800 to 00899	Lower Abdomen
00900 to 00999	Perineum
01000 to 01199	Pelvis (Except Hip)
01200 to 01299	Upper Leg (Except Knee)
01300 to 01444	Knee/Popliteal
01445 to 01599	Lower Leg
01600 to 01699	Shoulder/Axilla
01700 to 01799	Upper Arm & Elbow
01800 to 01899	Forearm, Wrist, Hand
01900 to 01950	Radiologic
01951 to 01953	Burn
01954 to 01989	Obstetric
01990 to 01999	Other

**eTable 2.** Percentage of Patients Who Used Opioids Before Surgery by Surgical Service and Percentage of Each Type of Opioid Used

	Overall	Cardiac	General/Gastrointestinal	General/Endocrine	Gynecology	General/Hepatology	Internal Medicine	Neurosurgery - Spine	Neurosurgery - Head	Neurosurgery - All others	Oral Surgery/Dentistry	Orthopedic - Hand non-art hr	Orthopedic - Spine	Orthopedic - Arthroplasty (hip, knee, ankle, shoulder, elbow, hand)	Orthopedic - All others
	(n = 34,186)	334	2308	1654	3165	1021	491	1081	771	409	1033	746	347	1990	3307
Opioid use prior to surgery	23.1%	10.8	19.3	14.3	16.3	23.7	12.4	55.1	19.7	34.7	28.1	23.3	65.1	33.5	27.0
<b>Types of opioids used by pre-op opioid users</b>															
Hydrocodone	59.3	47.2	55.6	60.6	59.7	55.8	52.5	58.4	53.9	50.7	58.8	59.2	60.0	51.3	60.8
Tramadol	21.3	25.0	28.9	23.7	23.4	21.1	26.2	18.3	21.1	23.2	18.7	20.7	18.7	35.8	16.0
Oxycodone PO	18.30	13.9	17.9	14.4	13.6	16.9	23.0	21.3	19.1	21.8	22.1	19.5	20.0	13.0	24.3
Morphine	5.8	5.6	6.7	2.1	6.0	9.5	3.3	10.1	3.3	9.2	3.8	3.4	11.6	4.2	3.0
Codeine	4.2	2.8	2.2	6.4	5.0	2.5	4.9	2.5	5.9	4.2	4.2	3.4	3.1	4.9	4.1
Fentanyl patch	1.9	5.6	1.6	1.3	1.4	2.5	0.0	3.2	1.3	3.5	3.1	0.6	3.6	1.9	0.8
Methadone	1.9	0.0	1.6	1.3	1.7	2.1	1.6	3.0	2.6	5.6	3.5	1.7	3.6	1.2	1.3
Buprenorphine (patch, tab, or film)	0.9	0.0	0.4	0.0	1.7	2.1	3.3	0.8	0.0	1.4	1.0	2.9	0.4	0.6	0.9
Tapentadol	0.2	0.0	0.0	0.0	0.0	0.4	0.0	0.8	0.0	0.0	0.3	0.0	0.4	0.2	0.1
Other (fentanyl lozenge, opium, butorphanol, hydromorphone,	0.2	0.0	0.7	0.0	0.0	0.4	0.0	0.2	0.7	0.7	0.3	0.0	0.4	0.5	0.1

**Supplemental table 1 (continued). Percent of patients who used opioids prior to surgery by surgical service and percentage of each type of opioid used.**

	Radiology	Otolaryngology - Head and Neck	Otolaryngology - All others	Plastics - Hand	Plastics - All others	Surgical Oncology	Transplant - Nephrectomy & Renal Transplant	Transplant - All others	Vascular	Thoracic - pulmonary	Thoracic - non-pulmonary	Urology - Transurethral	Urology - All others	Miscellaneous
	519	2563	1354	468	1565	2262	227	411	581	772	373	1046	3222	166
Opioid use prior to surgery	32.9	20.5	17.7	30.1	19.0	13.0	19.4	22.9	27.4	15.3	21.4	26.2	22.9	25.9
<b>Types of opioids used by pre-op opioid users</b>														
Hydrocodone	52.1	64.6	67.1	57.9	58.4	56.0	54.5	53.7	60.4	66.4	64.6	68.5	65.2	62.8
Tramadol	21.9	17.7	18.3	20.0	25.2	23.2	20.5	23.2	15.7	16.0	16.5	14.7	17.2	16.3
Oxycodone PO	20.7	16.6	16.3	20.0	20.5	15.4	20.5	21.1	18.9	11.8	11.4	18.3	17.3	23.3
Morphine	11.8	6.7	4.2	3.6	4.0	4.1	0.0	12.6	2.5	4.2	13.9	5.1	5.7	11.6
Codeine	1.2	3.2	2.5	2.1	3.0	9.9	6.8	0.0	11.9	9.2	3.8	3.3	4.5	7.0
Fentanyl patch	2.4	2.3	2.5	0.7	2.7	1.7	0.0	2.1	1.3	1.7	5.1	1.1	1.6	0.0
Methadone	5.9	1.9	1.7	0.7	1.3	0.0	2.3	1.1	0.6	0.0	1.3	1.5	1.5	4.7
Buprenorphine (patch, tab, or film)	0.6	0.8	0.8	3.6	1.0	0.7	2.3	0.0	1.3	0.0	0.0	0.7	0.4	0.0
Tapentadol	0.0	0.2	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Other (fentanyl lozenge, opium, butorphanol, hydromorphone, oxymorphone)	0.0	0.0	0.4	0.7	0.0	0.3	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0