

PEDSnet Procedure/Device Query

The purpose of this query is to provide prevalences of selected procedures in patients who are seen at a PEDSnet site. These procedures are associated with specific devices of interest.

The results of this feasibility query consist of data from seven PEDSnet sites:

- Children’s Hospital of Philadelphia
- Colorado Children’s Hospital
- Cincinnati Children’s Hospital
- Nationwide Children’s Hospital
- Nemours Children’s Hospital
- Seattle Children’s Hospital
- St. Louis Children’s Hospital

The procedure codes that were used in this query were provided to the data science team. Some edits were made to standardize the code for analysis but a thorough codeset revision was not performed.

Clinical Area Summary

The table below shows the prevalence of procedures, aggregated by clinical area. Prevalences are per 100,000 patients. The denominator is any patient with an encounter with the health system during the indicated year(s).

Clinical Area	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Cardiovascular	471.46	410.11	257.17	230.12
Dermatology	1.73	1.28	1.10	0.56
Dermatology/oncology	0.23	0.00	0.14	0.23
ENT	16532.56	11885.57	11751.65	11995.93
GI	68.48	36.33	42.18	39.34
Neurology	6.61	11.49	0.00	0.00
OBGYN/Urology	0.74	0.44	0.62	0.19
OBGYN/Women Health	15.96	10.50	9.41	8.13
Oncology	0.09	0.00	0.10	0.05
Orthopedics	570.95	341.45	340.62	345.37
Urology	0.06	0.10	0.00	0.00

Most Common Procedures

The table below stratifies aggregates by both clinical area and specific procedure code, to view the codes that account for the highest prevalence in each clinical area.

We limited to the top 15 codes per clinical area.

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Cardiovascular	37241	Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; venous, other than hemorrhage (eg, congenital or acquired venous ma	54.10	30.81	37.72	30.47
Cardiovascular	93653	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of an arrhythmia with right atrial pacing and recording, right ventricular pacing and recording (when n	50.19	25.43	30.28	30.75
Cardiovascular	93621	Comprehensive electrophysiologic evaluation including insertion and repositioning of multiple electrode catheters with induction or attempted induction of arrhythmia; with left atrial pacing and recording from coronary sinus or left atrium (List separatel	49.39	22.72	31.14	31.03
Cardiovascular	37.23	Combined right and left heart cardiac catheterization	48.37	84.09	0.00	0.00

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Cardiovascular	93296	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system or implantable defibrillator system, remote data acquisition(s), receipt of transmissions and technician review, technical support and distribution	47.86	29.97	34.22	36.56
Cardiovascular	93280	Programming device evaluation (in person) with iterative adjustment of the implantable device to test the function of the device and select optimal permanent programmed values with analysis, review and report by a physician or other qualified health care	39.95	28.74	31.91	25.97
Cardiovascular	37236	Transcatheter placement of an intravascular stent(s) (except lower extremity artery(s) for occlusive disease, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological super	25.41	15.13	15.64	14.21
Cardiovascular	88.43	Arteriography of pulmonary arteries	22.57	39.24	0.00	0.00
Cardiovascular	93294	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead pacemaker system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional	22.15	15.97	16.46	15.89

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Cardiovascular	93295	Interrogation device evaluation(s) (remote), up to 90 days; single, dual, or multiple lead implantable defibrillator system with interim analysis, review(s) and report(s) by a physician or other qualified health care professional	22.12	14.44	15.79	15.42
Cardiovascular	88.42	Aortography	21.58	37.51	0.00	0.00
Cardiovascular	37.21	Right heart cardiac catheterization	17.44	30.31	0.00	0.00
Cardiovascular	37242	Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance necessary to complete the intervention; arterial, other than hemorrhage or tumor (eg, congenital or acquire	15.48	8.48	9.65	9.94
Cardiovascular	37.26	Catheter based invasive electrophysiologic testing	15.45	26.86	0.00	0.00
Cardiovascular	37.34	Excision or destruction of other lesion or tissue of heart, endovascular approach	13.78	23.96	0.00	0.00
Dermatology	Q2026	Injection, radiesse, 0.1 ml	1.67	1.28	1.06	0.51
Dermatology	0191T	Insertion of anterior segment aqueous drainage device, without extraocular reservoir, internal approach, into the trabecular meshwork; initial insertion	0.06	0.00	0.05	0.05

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Dermatology/oncology	96904	Whole body integumentary photography, for monitoring of high risk patients with dysplastic nevus syndrome or a history of dysplastic nevi, or patients with a personal or familial history of melanoma	0.23	0.00	0.14	0.23
ENT	92551	Screening test, pure tone, air only	7847.40	6435.22	6122.77	6450.66
ENT	92567	Tympanometry (impedance testing)	3865.16	2543.54	2528.41	2567.02
ENT	69436	Tympanostomy (requiring insertion of ventilating tube), general anesthesia	2234.87	1182.28	1357.73	1433.45
ENT	92587	Distortion product evoked otoacoustic emissions; limited evaluation (to confirm the presence or absence of hearing disorder, 3-6 frequencies) or transient evoked otoacoustic emissions, with interpretation and report	1979.22	1258.04	1354.04	1116.93
ENT	92552	Pure tone audiometry (threshold); air only	1411.13	866.31	853.47	934.79
ENT	92579	Visual reinforcement audiometry (VRA)	1374.70	859.51	856.21	853.74
ENT	92555	Speech audiometry threshold	1318.41	791.44	811.34	838.78
ENT	92582	Conditioning play audiometry	903.70	559.32	568.09	548.13
ENT	92556	Speech audiometry threshold; with speech recognition	746.98	460.88	447.39	446.26
ENT	92557	Comprehensive audiometry threshold evaluation and speech recognition (92553 and 92556 combined)	604.04	412.63	393.31	377.19

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
ENT	92586	Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; limited	441.80	266.87	253.04	229.38
ENT	92553	Pure tone audiometry (threshold); air and bone	355.00	224.77	219.35	218.60
ENT	92583	Select picture audiometry	332.86	219.55	218.63	171.31
ENT	92585	Auditory evoked potentials for evoked response audiometry and/or testing of the central nervous system; comprehensive	319.79	159.81	163.98	240.11
ENT	92550	Tympanometry and reflex threshold measurements	228.85	145.07	139.65	118.31
GI	43659	Unlisted laparoscopy procedure, stomach	21.44	11.58	13.96	10.68
GI	43999	Unlisted procedure, stomach	10.35	6.95	6.29	4.74
GI	C1767	Generator, neurostimulator (implantable), non-rechargeable	8.02	4.19	4.17	5.39
GI	43260	Endoscopic retrograde cholangiopancreatography (ERCP); diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)	5.98	2.81	3.02	4.55
GI	C1778	Lead, neurostimulator (implantable)	4.34	2.32	2.02	2.97

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
GI	43274	Endoscopic retrograde cholangiopancreatography (ERCP); with placement of endoscopic stent into biliary or pancreatic duct, including pre- and post-dilation and guide wire passage, when performed, including sphincterotomy, when performed, each stent	3.71	2.46	2.16	1.86
GI	43262	Endoscopic retrograde cholangiopancreatography (ERCP); with sphincterotomy/papillotomy	3.54	2.02	1.97	2.00
GI	43264	Endoscopic retrograde cholangiopancreatography (ERCP); with removal of calculi/debris from biliary/pancreatic duct(s)	3.46	2.17	2.26	1.67
GI	43261	Endoscopic retrograde cholangiopancreatography (ERCP); with biopsy, single or multiple	2.98	1.08	1.97	1.95
GI	0JH60DZ	Insertion of Multiple Array Stimulator Generator into Chest Subcutaneous Tissue and Fascia, Open Approach	2.64	0.30	1.68	2.46
GI	64590	Insertion or replacement of peripheral or gastric neurostimulator pulse generator or receiver, direct or inductive coupling	2.58	1.08	1.78	1.81
GI	43275	Endoscopic retrograde cholangiopancreatography (ERCP); with removal of foreign body(s) or stent(s) from biliary/pancreatic duct(s)	2.24	1.28	1.39	1.16

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
GI	0JH60MZ	Insertion of Stimulator Generator into Chest Subcutaneous Tissue and Fascia, Open Approach	1.87	0.10	1.73	1.30
GI	43276	Endoscopic retrograde cholangiopancreatography (ERCP); with removal and exchange of stent(s), biliary or pancreatic duct, including pre- and post-dilation and guide wire passage, when performed, including sphincterotomy, when performed, each stent exchange	1.84	0.89	1.15	1.11
GI	43277	Endoscopic retrograde cholangiopancreatography (ERCP); with trans-endoscopic balloon dilation of biliary/pancreatic duct(s) or of ampulla (sphincteroplasty), including sphincterotomy, when performed, each duct	0.99	0.64	0.53	0.56
Neurology	03.59	Other repair and plastic operations on spinal cord structures	4.62	8.03	0.00	0.00
Neurology	3.59	Other repair and plastic operations on spinal cord structures	1.62	2.81	0.00	0.00
Neurology	03.6	Lysis of adhesions of spinal cord and nerve roots	0.26	0.44	0.00	0.00
Neurology	03.93	Implantation or replacement of spinal neurostimulator lead(s)	0.17	0.30	0.00	0.00
Neurology	3.6	Lysis of adhesions of spinal cord and nerve roots	0.03	0.05	0.00	0.00
Neurology	3.93	Implantation or replacement of spinal neurostimulator lead(s)	0.03	0.05	0.00	0.00

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
OBGYN/Urology	57288	Sling operation for stress incontinence (eg, fascia or synthetic)	0.68	0.35	0.62	0.19
OBGYN/Urology	59.4	Suprapubic sling operation	0.11	0.20	0.00	0.00
OBGYN/Women Health	C1789	Prosthesis, breast (implantable)	6.55	3.45	3.55	4.04
OBGYN/Women Health	51715	Endoscopic injection of implant material into the submucosal tissues of the urethra and/or bladder neck	5.78	4.44	3.70	2.28
OBGYN/Women Health	19325	Mammaplasty, augmentation; with prosthetic implant	1.05	0.59	0.58	0.65
OBGYN/Women Health	L8606	Injectable bulking agent, synthetic implant, urinary tract, 1 ml syringe, includes shipping and necessary supplies	0.79	1.04	0.34	0.09
OBGYN/Women Health	57288	Sling operation for stress incontinence (eg, fascia or synthetic)	0.60	0.35	0.48	0.19
OBGYN/Women Health	19357	Breast reconstruction, immediate or delayed, with tissue expander, including subsequent expansion	0.54	0.30	0.38	0.37
OBGYN/Women Health	19340	Immediate insertion of breast prosthesis following mastopexy, mastectomy or in reconstruction	0.40	0.10	0.34	0.23
OBGYN/Women Health	58563	Hysteroscopy, surgical; with endometrial ablation (eg, endometrial resection, electrosurgical ablation, thermoablation)	0.26	0.20	0.14	0.09
OBGYN/Women Health	19342	Delayed insertion of breast prosthesis following mastopexy, mastectomy or in reconstruction	0.23	0.15	0.10	0.14

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
OBGYN/Women Health	19328	Removal of intact mammary implant	0.17	0.15	0.10	0.05
OBGYN/Women Health	53.61	Other open incisional hernia repair with graft or prosthesis	0.17	0.30	0.00	0.00
OBGYN/Women Health	85.53	Unilateral breast implant	0.17	0.30	0.00	0.00
OBGYN/Women Health	85.89	Other mammoplasty	0.14	0.25	0.00	0.00
OBGYN/Women Health	0TUC0KZ	Supplement Bladder Neck with Nonautologous Tissue Substitute, Open Approach	0.11	0.00	0.10	0.09
OBGYN/Women Health	19330	Removal of mammary implant material	0.11	0.05	0.10	0.05
Oncology	77435	Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions	0.09	0.00	0.10	0.05
Orthopedics	20680	Removal of implant; deep (eg, buried wire, pin, screw, metal band, nail, rod or plate)	223.86	117.56	131.15	138.70
Orthopedics	20610	Arthrocentesis, aspiration and/or injection, major joint or bursa (eg, shoulder, hip, knee, subacromial bursa); without ultrasound guidance	98.93	61.37	60.95	58.06
Orthopedics	20670	Removal of implant; superficial (eg, buried wire, pin or rod) (separate procedure)	72.73	44.22	39.49	40.51

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Orthopedics	20605	Arthrocentesis, aspiration and/or injection, intermediate joint or bursa (eg, temporomandibular, acromioclavicular, wrist, elbow or ankle, olecranon bursa); without ultrasound guidance	36.97	23.71	22.55	19.05
Orthopedics	26727	Percutaneous skeletal fixation of unstable phalangeal shaft fracture, proximal or middle phalanx, finger or thumb, with manipulation, each	31.87	15.87	19.00	18.95
Orthopedics	22844	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 13 or more vertebral segments (List separately in addition to code for primary procedure)	27.90	15.18	15.50	16.44
Orthopedics	20611	Arthrocentesis, aspiration and/or injection, major joint or bursa (eg, shoulder, hip, knee, subacromial bursa); with ultrasound guidance, with permanent recording and reporting	25.83	11.88	17.90	19.28
Orthopedics	22843	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 7 to 12 vertebral segments (List separately in addition to code for primary procedure)	25.63	14.10	14.92	14.45
Orthopedics	81.05	Dorsal and dorsolumbar fusion of the posterior column, posterior technique	21.15	36.77	0.00	0.00
Orthopedics	81.64	Fusion or refusion of 9 or more vertebrae	17.24	29.97	0.00	0.00

Clinical Area	Procedure Code	Procedure Name	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Orthopedics	20600	Arthrocentesis, aspiration and/or injection, small joint or bursa (eg, fingers, toes); without ultrasound guidance	12.48	8.92	6.62	6.41
Orthopedics	22849	Reinsertion of spinal fixation device	12.45	9.22	11.57	10.92
Orthopedics	20604	Arthrocentesis, aspiration and/or injection, small joint or bursa (eg, fingers, toes); with ultrasound guidance, with permanent recording and reporting	7.17	4.73	4.75	5.02
Orthopedics	22842	Posterior segmental instrumentation (eg, pedicle fixation, dual rods with multiple hooks and sublaminar wires); 3 to 6 vertebral segments (List separately in addition to code for primary procedure)	6.07	3.94	3.60	2.83
Orthopedics	26756	Percutaneous skeletal fixation of distal phalangeal fracture, finger or thumb, each	4.51	2.51	2.45	2.65
Urology	C1815	Prosthesis, urinary sphincter (implantable)	0.06	0.10	0.00	0.00

Device Area Summary

The table below shows the prevalence of procedures, aggregated by device area. Prevalences are per 100,000 patients. The denominator is any patient with an encounter with the health system during the indicated year(s).

Device Area	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Otorhinolaryngological/hearing aid	14907.92	10989.34	10713.52	10911.56
Ventilation tube for ear canal	2248.25	1203.42	1359.03	1435.27
Cardiac Rythym Device	274.81	193.18	180.29	167.04
General Deep	223.86	117.56	131.15	138.70
General Major joint	117.36	69.65	75.77	74.18

Device Area	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Vascular	112.17	70.19	75.58	59.83
0	108.97	67.63	60.47	60.25
Vascular Diagnostic	95.13	165.38	0.00	0.00
General Superficial	72.73	44.22	39.49	40.51
Spine Lumbar	62.61	33.72	36.18	37.21
Spine	42.48	58.81	14.64	13.33
General intermediate joint	36.97	23.71	22.55	19.05
Finger	36.83	18.58	21.74	21.88
Vascular Interventional	24.53	42.64	0.00	0.00
General small joint	18.20	12.08	10.99	11.10
reconstrucstion/augmentation	8.59	4.68	4.70	5.39
Heart Valves	8.00	5.96	3.46	4.37
Other procedures	6.52	2.51	5.23	3.44
Hip	6.49	4.39	3.26	3.76
Foot	6.27	3.80	2.88	4.18
Urinary incontinence/Female	6.01	4.63	3.89	2.32
Knee	4.79	2.91	3.46	2.09
Heart Failure	2.21	2.12	0.72	1.02
Spine Cervical below C2	1.96	1.48	0.67	1.21
Ankle	0.82	0.39	0.58	0.42
Stress Urinary Incontinence: Sling	0.74	0.44	0.62	0.19
Finger Interphalangeal joint	0.68	0.25	0.62	0.28
Sling Procedure for Female Stress Urinary Incontinence	0.68	0.35	0.58	0.23
Shoulder	0.60	0.30	0.29	0.42
Spine Additional vertebral body	0.43	0.20	0.14	0.37
Pelvic organ prolapse and (etc.)	0.34	0.49	0.05	0.05

Device Area	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Spine Cervicothoracic	0.34	0.05	0.19	0.33
Endometrial ablation	0.31	0.30	0.14	0.09
Spine Lumbosacral	0.28	0.25	0.14	0.09
Elbow	0.26	0.15	0.14	0.14
Finger MCP joint	0.26	0.15	0.29	0.00
Gastric electrical stimulation	0.26	0.05	0.10	0.28
Obesity devices	0.26	0.25	0.19	0.00
Dermoscopy to detect atypical nevi, or dysplastic nevi, or Melanoma	0.23	0.00	0.14	0.23
removal/revision	0.23	0.15	0.14	0.09
Finger Thumb	0.17	0.10	0.14	0.05
General	0.11	0.20	0.00	0.00
knee	0.11	0.15	0.00	0.05
Pain palliation	0.09	0.00	0.10	0.05
Hysteroscopic sterilization	0.06	0.05	0.05	0.00
Male Incontinence	0.06	0.10	0.00	0.00
gastrointestinal/ obesity	0.03	0.05	0.00	0.00
Sacral	0.03	0.05	0.00	0.00

Most Common Devices

The table below stratifies counts specific device, to view the codes that account for the highest prevalence.

Device	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Nucleus Hybrid L24	14907.92	10989.34	10713.52	10911.56
Preceptis Hummingbird tympanostomy tube system (PS150001)	2248.25	1203.42	1359.03	1435.27
Implant in general	278.30	151.23	160.33	168.81
Catheter	176.28	219.65	43.86	42.13

Device	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Arthrocentesis	157.68	94.20	102.41	97.50
Pacemaker	132.19	92.72	98.95	90.44
Left atrial appendage transcatheter occlusion	70.80	39.78	48.23	41.85
ALIF	60.79	33.42	34.65	35.81
Defibrillator	53.19	36.48	37.53	35.07
Enterra	43.58	23.07	27.35	24.62
finger fixation/fusion	36.52	18.58	21.59	21.51
IOLs	31.79	18.39	17.04	19.97
non-coronary stent	31.16	18.78	19.05	17.51
Fusion	27.84	48.41	0.00	0.00
Lap Band, Realize Band, Maestro, Orbera, ReShape Duo, AspireAssist	27.42	16.51	17.47	12.87
Duodenoscope	19.37	10.25	11.18	11.98
Lead	16.25	28.24	0.00	0.00
Fusion removal/revision	15.37	11.53	13.87	13.29
Transluminal balloon angioplasty	14.91	14.00	12.33	0.60
0	11.37	19.32	0.14	0.37
Echocardiograph	8.96	5.37	4.89	4.97
breast implant	8.65	4.68	4.75	5.43
Stent	8.65	15.03	0.00	0.00
LASIK or PRK	7.23	3.01	5.57	3.81
Macroplastique	4.91	3.89	3.12	1.95
Therapeutic dose of electric current to the heart	4.88	3.30	3.22	2.28
Coaptite Injectable	4.68	3.70	2.93	1.90
X-ray (and iodine-containing contrast material) of blood vessels	4.34	7.54	0.00	0.00
Hip replacement	4.20	3.40	1.92	2.14

Device	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
ALIF and Posterolateral Fusion	3.63	1.87	2.59	1.72
Mitral Valve	3.40	2.46	1.44	2.04
TAVR/TAVI	2.33	0.59	1.44	1.90
Acetabuloplasty	2.27	0.99	1.39	1.53
Cardiac device	2.27	3.94	0.00	0.00
Osteochondral allograft	2.24	0.99	1.49	1.30
subtalar fusion	2.24	1.08	1.25	1.49
Echocardiogram	2.18	3.80	0.00	0.00
intravascular implant	2.13	1.28	1.25	1.07
Knee replacement	1.98	1.33	1.73	0.65
Anterior Fusion	1.96	1.48	0.67	1.21
PLIF/TLIF	1.81	0.49	1.34	1.21
Great toe Metatarsophalangeal fusion	1.79	1.13	0.58	1.35
Dual chamber device	1.70	2.96	0.00	0.00
Juvederm, Restylane, Sculptra, VellaFill, Radiesse, Belotero, Emervel	1.67	1.28	1.06	0.51
Ventricular Assist Device	1.59	1.04	0.72	1.02
Intervertebral biomechanical device	1.53	1.63	0.96	0.05
Aortic valve	1.42	2.46	0.00	0.00
Tricuspid Valve	1.19	0.69	0.67	0.65
Triple fusion	1.16	0.54	0.62	0.88
Great toe Interphalangeal fusion	0.91	0.79	0.53	0.28
Ankle fusion	0.82	0.39	0.58	0.42
Pacemaker/defibrillator	0.77	0.30	0.62	0.37
ALTIS	0.68	0.35	0.58	0.23
finger implant	0.68	0.25	0.62	0.28
intracoronary stent	0.68	0.69	0.24	0.28

Device	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
ContaSure (PS130015)	0.62	0.39	0.48	0.19
Midtarsal or Tarsometatarsal fusion	0.62	0.35	0.10	0.60
Solyx (PS120093)	0.62	0.39	0.48	0.19
Follow-up electrophysiologic to evaluate the efficacy of therapy	0.60	0.25	0.48	0.28
Finger implant	0.54	0.10	0.38	0.42
Shoulder replacement	0.51	0.15	0.29	0.42
Vertebroplasty	0.48	0.20	0.29	0.33
External heart assist system	0.45	0.79	0.00	0.00
PLIF and Posterolateral Fusion	0.43	0.15	0.14	0.42
Knee Replacement	0.40	0.69	0.00	0.00
Revascularization	0.37	0.10	0.24	0.28
Acell MatriStem	0.34	0.49	0.05	0.05
Autologous chondrocyte implants	0.34	0.20	0.24	0.14
Implantable heart assist system	0.34	0.59	0.00	0.00
Minerva (P140013)	0.28	0.25	0.14	0.09
P000057	0.26	0.15	0.29	0.00
MELAFIND	0.23	0.00	0.14	0.23
Kyphoplasty	0.20	0.15	0.10	0.09
Neurostimulator	0.20	0.35	0.00	0.00
Catheter for recording upper heart rhythm	0.17	0.10	0.14	0.05
Elbow replacement	0.17	0.15	0.10	0.05
Transluminal coronary balloon angioplasty	0.14	0.15	0.05	0.05
foot/toe joint replacement	0.11	0.20	0.00	0.00
Heart assist system	0.11	0.20	0.00	0.00
Heart replacement	0.11	0.20	0.00	0.00
Pantalar fusion	0.11	0.05	0.05	0.09

Device	2015-2017 Prevalence	2015 Prevalence	2016 Prevalence	2017 Prevalence
Elbow fusion	0.09	0.00	0.05	0.09
ExAblate for bone cancer pain palliation (P110039)	0.09	0.00	0.10	0.05
Extracorporeal circulatory assist system	0.09	0.15	0.00	0.00
Partial shoulder replacement	0.09	0.15	0.00	0.00
stent	0.09	0.10	0.00	0.05
Argus II	0.06	0.00	0.05	0.05
Essure (P020014, PS160001)	0.06	0.05	0.05	0.00
External heart assist device	0.06	0.10	0.00	0.00
Glaukos Istent	0.06	0.00	0.05	0.05
Hip fusion	0.06	0.00	0.00	0.09
Interspinous Spacer	0.06	0.10	0.00	0.00
ProACT (P130018)	0.06	0.10	0.00	0.00
Realize Gastric Band	0.06	0.05	0.05	0.00
Total elbow replacement	0.06	0.10	0.00	0.00
carotid artery stent	0.03	0.05	0.00	0.00
Dynamic Stablization	0.03	0.05	0.00	0.00
Knee fusion	0.03	0.00	0.05	0.00
NovaSure (P010013)	0.03	0.05	0.00	0.00
Sacroliac Joint Fusion	0.03	0.05	0.00	0.00