

Washington state agency utilization data

Population

Data represent paid or accepted claims for procedures and services associated with a diagnosis of tinnitus between July 1, 2016 and June 30, 2019. Administrative claims and encounter data from the following Washington state health programs were assessed: the Public Employees Benefit Board Uniform Medical Plan (PEBB/UMP), Medicaid managed care (MCO) and fee-for-service (FFS), and the Department of Labor and Industries Workers' Compensation Plan.

The assessment includes final, paid and adjudicated claims, encounters and bills. Denied claims/bills or rejected encounters are excluded. Individuals that were dually eligible for both Medicare and Medicaid are excluded from the Medicaid program analysis. The PEBB/UMP experience focuses on non-Medicare services received.

Timeframe

Data are reported annually according to the state fiscal year. A 6-month claims runout was observed for data completeness and reliability.

Diagnosis of tinnitus

The assessment focuses on procedures and services related to a diagnosis of tinnitus according to the international classification of diseases (ICD), version 10.

ICD-10 code	Description
H93.1	Tinnitus
H93.11	Tinnitus, right ear
H93.12	Tinnitus, left ear
H93.13	Tinnitus, bilateral
H93.19	Tinnitus, unspecified ear

Payments for procedures related to tinnitus diagnosis

Includes payments for procedures and services that were associated with a diagnosis of tinnitus in the measurement period. The agency experience analysis includes two approaches to understand payments for tinnitus-related services and procedures:

- Paid (Medicaid and PEBB/UMP) and allowed (L&I) amounts for procedures and services with a first listed diagnosis of tinnitus were summed by year and for the 3-year measurement period.
- To provide a more comprehensive understanding of the payments for tinnitus-related procedures and services, the paid amount for the encounter associated with the date of service was summed by state health program, by year and by type of claim. The amounts used to calculate were as follows:
 - Paid amount (Medicaid FFS, PEBB/UMP)
 - MCO reported paid amount (Medicaid MC)
 - Allowed amount (L&I)

Table 1. Procedures and services associated with tinnitus diagnosis, by state health program (SFY 2017-2019)

State health program	State fiscal year			Overall (3 years)
	2017	2018	2019	Unique individuals
Medicaid				
Fee for service (FFS)				
Average annual members (excludes duals)	139,173	111,414	111,222	120,603
Individuals with at least one procedure/service, tinnitus first listed dx	139	126	118	359
Gender (count, col %)				
Female	74 (53)	70 (56)	66 (55)	200 (56)
Age (count, col %)				
LT 21 years	43 (31)	33 (26)	21 (18)	92 (26)
21-34 years	21 (15)	25 (20)	22 (19)	63 (18)
35-44 years	18 (13)	18 (14)	23 (19)	56 (16)
45-54 years	22 (16)	18 (14)	21 (18)	55 (15)
55-64 years	17 (12)	20 (16)	14 (12)	47 (13)
65 years and older	18 (13)	12 (10)	17 (14)	46 (13)
Diagnosis (count, col %)				
Tinnitus, bilateral (H93.13)	71 (51)	59 (47)	63 (53)	171 (48)
Managed care (MC)				
Average annual members (excludes duals)	1,579,124	1,570,142	1,532,692	1,560,653
Individuals with at least one procedure/service, tinnitus first listed dx	2296	2480	2414	6799
Gender (count, col %)				
Female	1217 (53)	1347 (54)	1317 (55)	3676 (54)
Age (count, col %)				
Less than 21 years	NR	NR	NR	1213 (17)
21-34 years	466 (20)	553 (22)	527 (22)	1470 (22)
35-44 years	363 (16)	361 (15)	418 (17)	1079 (16)
45-54 years	504 (22)	506 (20)	440 (18)	1376 (20)
55-64 years	631 (28)	629 (25)	584 (24)	1720 (25)
65 years and older	NR	NR	NR	31 (0.5)
Diagnosis (count, col %)				
Tinnitus, bilateral (H93.13)	1191 (52)	1315 (53)	1337 (55)	3618 (53)
Washington State Department of Labor and Industries (L&I)	2017	2018	2019	Unique individuals
Workers' compensation claims by year	126,524	124,081	124,959	125,188
Individuals with at least one procedure/service, tinnitus first listed dx	1171	878	831	2645
Gender (count, col %)				
Female	136 (12)	88 (10)	92 (11)	289 (11)
Age (count, col %)				
Less than 21 years	NR	NR	NR	NR
21-34 years	NR	NR	NR	NR
35-44 years	84 (7)	67 (7)	51 (6)	175 (7)

State health program	State fiscal year			Overall (3 years)
45-54 years	210 (18)	145 (17)	139 (17)	440 (17)
55-64 years	466 (40)	325 (37)	332 (40)	1039 (39)
65 years and older	364 (31)	296 (32)	258 (31)	854 (32)
Diagnosis (count, col %)				
Tinnitus, bilateral (H93.13)	944 (81)	727 (83)	669 (81)	2162 (82)
Public Employees Benefit Board Uniform Medical Plan (PEBB/UMP)	2017	2018	2019	Unique individuals
Annual active members	187,673	196,020	198,347	194,013
Individuals with at least one procedure/service, tinnitus first listed dx	662	730	734	1973
Gender (count, col %)				
Female	345 (52)	385 (53)	389 (53)	1037 (53)
Age (count, col %)				
Less than 21 years	40 (6)	45 (6)	40 (5)	121 (6)
21-34 years	51 (8)	68 (9)	76 (10)	181 (9)
35-44 years	97 (15)	106 (15)	115 (16)	296 (15)
45-54 years	138 (21)	156 (21)	142 (19)	407 (21)
55-64 years	273 (41)	284 (39)	288 (39)	780 (40)
65 years and older	63 (10)	71 (10)	73 (10)	188 (10)
Diagnosis (count, col %)				
Tinnitus, bilateral (H93.13)	371 (56)	419 (57)	412 (56)	1110 (56)

Data notes: NR = not reported; primary and secondary suppression applied to protect patient privacy. Individuals who had a procedure in more than one year are counted once in the “Overall (3 year)” summary. Percent may not add to 100% due to rounding or missing values. ICD10 coding for tinnitus diagnosis represents a point-in-time approximation of distribution of tinnitus (bilateral vs. unilateral or unspecified).

Table 2. Summary of encounters and paid amounts for procedures associated with first listed diagnosis tinnitus

State health program	State fiscal year			Overall (3 years)
	2017	2018	2019	Unique individuals
Medicaid				
Fee for service (FFS)				
Medicaid, fee-for-service population (reference)	139,173	111,414	111,222	120,603
Individuals with at least one procedure/service, tinnitus first listed dx	139	126	118	359
Number of procedure-days	256	226	192	674
Average procedure-days per individual	1.8	1.8	1.6	1.9
Max procedure days per individual	7	10	5	12
Paid amount, line-level, tinnitus as first listed diagnosis	\$23,966	\$24,454	\$27,144	\$75,564
Average payments per individual	\$172	\$194	\$230	\$210
Managed care (MC)				
Medicaid, managed care population (reference)	1,579,124	1,570,142	1,532,692	1,560,653
Individuals with at least one procedure/service, tinnitus first listed dx	2296	2480	2414	6799
Number of procedure-days	4168	4320	4295	12783
Average procedure-days per individual	1.8	1.7	1.8	1.9
Max procedure days per individual	16	17	20	25
Paid amount, line-level, tinnitus as first listed diagnosis	\$271,369	\$243,488	\$263,892	\$778,748
Average payments per individual	\$118	\$98	\$109	\$115
Washington State Department of Labor and Industries (L&I)	2017	2018	2019	Unique individuals
Workers' compensation claims by year	126,524	124,081	124,959	125,188
Individuals with at least one procedure/service, tinnitus first listed dx	1171	878	831	2645
Number of procedure-days	1779	1310	1277	4366
Average procedure-days per individual	1.5	1.5	1.5	1.7
Max procedure days per individual	36	54	27	78
Total payments, tinnitus as first listed diagnosis	\$684,271	\$544,929	\$527,036	\$1,756,236
Average payments per individual	\$584	\$621	\$634	\$664
Public Employees Benefit Board Uniform Medical Plan (PEBB/UMP)	2017	2018	2019	Unique individuals
Annual active members	187,673	196,020	198,347	194,013
Individuals with at least one procedure/service, tinnitus first listed dx	662	730	734	1973
Number of procedure-days	920	1064	1073	3057
Average procedure-days per individual	1.4	1.5	1.5	1.5
Max procedure days per individual	35	15	17	35
Paid amount, line-level, tinnitus as first listed diagnosis	\$148,095	\$182,116	\$182,185	\$512,396
Average payments per individual	\$224	\$249	\$248	\$260

Data notes: Encounter defined as a date of service associated with at least one procedure or service associated with tinnitus as the first listed diagnosis. Amount paid reflects all claims submitted with the procedure code for the date of service, and includes professional, facility and ancillary claims (such as durable medical equipment). Managed care amount paid reflects an estimate of the cost for the procedure. Individuals who had a procedure in more than one year are counted once in the “Overall (3 year)” summary.

Table 3. Encounter-level payments associated with first listed diagnosis tinnitus, overall and by claim type

State health program	State fiscal year						Overall
Medicaid	2017		2018		2019		Total
Total, overall	\$315,889		\$317,755		\$322,458		\$956,103
Service billed as FFS / MC	FFS	MC	FFS	MC	FFS	MC	
Total, by FFS / MC	\$23,966	\$291,923	\$24,454	\$293,301	\$27,144	\$295,314	\$956,103
Ambulatory surgery center	\$0	\$1,540	\$0	\$0	\$0	\$303	\$1,843
EPSDT	\$0	\$0	\$427	\$167	\$0	\$667	\$1,261
Inpatient	\$0	\$0	\$0	\$0	\$0	\$5,314	\$5,314
Med vendor	\$0	\$4,869	\$377	\$2,100	\$542	\$247	\$8,134
OPPS	\$6,089	\$75,127	\$5,764	\$72,794	\$3,998	\$74,958	\$238,731
Outpatient	\$16	\$21,476	\$711	\$15,674	\$676	\$10,135	\$48,687
Pharmacy	\$158	\$0	\$27	\$0	\$10	\$0	\$195
Professional	\$17,703	\$188,911	\$17,149	\$202,567	\$21,919	\$203,689	\$651,938
PEBB/UMP	2017		2018		2019		Total
Total, overall	\$153,132		\$187,638		\$189,112		\$529,883
Emergency Room		\$6,802		\$9,653		\$1,446	\$17,901
Medical		\$142,758		\$174,175		\$183,091	\$500,025
Outpatient		\$3,572		\$250		\$4,575	\$8,397
Outpatient Ambulatory Surgery		\$0		\$3,560		\$0	\$3,560
Labor & Industries	2017		2018		2019		Total
Total, overall	\$691,463		\$547,354		\$534,101		\$1,772,917
Dental		\$262		\$0		\$977	\$1,240
Miscellaneous		\$138,317		\$132,653		\$130,368	\$401,338
Outpatient bill		\$25,917		\$17,793		\$20,024	\$63,734
Practitioner bill		\$526,966		\$396,908		\$382,731	\$1,306,606

Data notes: Data represent encounter paid amounts. Medicaid managed care represent the amount the MCO reported paid for the encounter.

Table 4. Non-invasive, non-pharmacologic treatment, associated with diagnosis tinnitus listed anywhere on claim (SFY 2017-2019)

Medicaid (FFS & MC)	PEBB/UMP & Labor and Industries
<p>Represents 110 services, 59 beneficiaries</p> <ul style="list-style-type: none"> • Biofeedback train any meth • Ent procedure/service • Hearing aid exam both ears • Hearing aid exam one ear • Infrared therapy • Intervene hlth/behave indiv • Preventive counseling indiv • Psytx w pt 30 minutes • Psytx w pt 45 minutes • Psytx w pt 60 minutes • Psytx w pt w e/m 30 min • Speech/hearing therapy 	<p>Represents 569 services, 60 members / claimants</p> <ul style="list-style-type: none"> • Acupuncture, one or more needles, w electrical stimulation; ea addl 15 min, w re-insertion of needle(s) • Acupuncture, one or more needles, w electrical stimulation; initial 15 min of personal contact w the patient • Acupuncture, one or more needles, without electrical stimulation; init 15 min personal contact with the patient • Acupuncture, one or more needles, without electrical stimulation; ea addl 15 min, w re-insertion of needle(s) • Application, modality to 1+ areas; infrared • Durable medical equipment mi • Ent procedure/service • Hearing aid exam & selection; binaural • Hearing service • Speech/hearing therapy

Data notes: Due to small numbers, PEBB/UMP and Labor and Industries are presented together.