

## DATA BRIEF- ASTHMA

### Data Captured

- Claims utilisation for asthma and COPD related diagnoses
- Asthma related emergency room visits
- Expenditure for 10 most common asthma pharmaceuticals

### Disclaimer & Explanation

Data provided in this response is provided by the Bermuda Health Council and must be cited and authorized prior to publication or use. Bermuda Health Council does not make any guarantees or provide third party validation for the data sources.

Data briefs are created and posted based on input from a variety of stakeholders and are used for multiple applications. The data presented below are by topic, with specifics such as diagnoses codes and procedures codes often coming from the requestor. As a result, the same topic or condition may show different claims data, due to variability in coding selection. Additionally, as information is received, changes in data capture may occur, which may be corroborated by the dates of the request. Due to the nature of procedure coding, many codes are not mutually exclusive to a specific application or specialty, which means values for office visits, for example, may appear in multiple specialty analytics. Additional information is available, with regard to claim type and diagnosis to discern further follow up, as needed. Finally, analytics for “common” coding in any field are strictly based on identically matching values. It is possible other, frequent codes exist, but may not be captured if entered in multiple varied formats.

The data used to generate this brief includes claims data and expenditure from 1 April 2016 to 31 March 2017. For any clarification or follow up information, please email [healthcouncil@bhec.bm](mailto:healthcouncil@bhec.bm). To submit a topic of interest for a data brief, please complete an online [Data Analysis Interest Form](#).

### Data

Claims by Diagnosis			
ICD-9 or ICD-10 Used	Description	Number of Claims (Primary) <sup>1</sup>	Number of Claims (All Diagnoses) <sup>2</sup>
493.01	EXT ASTHMA w STATUS ASTH	2	2
493.02	EXT ASTHMA w(ACUTE) EXAC	34	39
493.10	INTRINSIC ASTHMA NOS	21	21
493.12	INT ASTHMA W (AC) EXAC	14	14
493.20	CHRONIC OBST ASTHMA NOS	44	80
493.21	CH OB ASTHMA W STAT ASTH	17	17

493.22	CH OBST ASTH W (AC) EXAC	720	922
493.81	EXERCSE IND BRONCHOSPASM	7	14
493.82	COUGH VARIANT ASTHMA	47	49
493.90	ASTHMA NOS	2536	17145
493.91	ASTHMA W STATUS ASTHMAT	131	132
493.92	ASTHMA NOS W (AC) EXAC	2777	3544
J45.909	UNSPECIFIED ASTHMA, UNCOMPLICATED	20	542
J45.998	OTHER ASTHMA	1	3
J45.20	MILD INTERMITTENT ASTHMA, UNCOMPLICATED	3	68
J45.21	MILD INTERMIT ASTHMA W (ACUTE) EXAC	1	4
J45.50	SEVERE PERSISTENT ASTH, UNCOMPLICATED	4	8
J45.90	UNSPECIFIED ASTHMA	21	300
<b>TOTAL</b>		<b>6400</b>	<b>22904</b>

<sup>1</sup> Number of insurance claims where the primary diagnosis was an ICD-9 or ICD-10 code associated with Asthma. <sup>2</sup> Number of insurance claims where any diagnosis (one through five) was an ICD-9 or ICD-10 code associated with Asthma.

**20 Most Common Procedures Associated with Asthma as Primary Diagnosis**

BHB CODE	Description	Number of Claims
2626125	ER VISIT 5	940
2425049	XRAY-CHEST	310
2626026	ER VISIT 4	292
1616143	HOSPITALIST LV 2 EP	228
1212331	LAB- ED PRF NA BN RBS K C	221
2828937	UCE VISIT LEVEL 3	208
99212	UROLOGIST OV LV2 EP	200
99213	ANEST OV LEVEL III EP X 15 MINUTES	184
1412006	LOS GLOMERULAR FILTRATION RATE	179
910091	LAB- CBC	225
2222016	CR-ELECTROCARDIOGRAM	139
2525178	PT LUNG FUNCTION TEST 15 MINUTES	119
2323319	LAB-TROPONIN	115
1212901	LAB-NT-PRO BNP	92
2424281	XR- CHEST STANDARD 1 V	91
910083	LAB- COAGULATION SCREENING	86
1211044	LAB- ACID BAS BAL (BL GAS)	73
3535002	ASTHMA MGMT/ INITIAL VIS	65
2525723	PT PRE/POST LUNG FUNCT TEST 15 MIN	60
26125	LAB BLOOD CULTURE	57

**20 Most Common Procedures Associated with Asthma as Any Diagnosis**

BHB CODE	Description	Number of Claims
2626125	ER VISIT 5	1,345
2626117	ER VISIT 3	1,044
1212331	LAB ED	1,041
1412006	LAB GLOMERULAR FILTRATION	893
1616143	HOSPITALIST LV 2 EP	845

2626026		ER VISIT 4	831
910091		LAB CBC	1003
2425049		XRAY- CHEST	714
2222016		CR ELECTROCARDIOGRAM	642
2828937		UCE VISIT 3	529
2323319		LAB-TROPONIN	509
910083		LAB-COAGULATION SCREENING	368
1211333		LAB-LFTS BL SG PT SG AL	287
99212		FC-EST PATIENT LV2 VISIT	275
1212919		LAB CRP	257
2727063		AL AMBULANCE EMERGENCY	256
1212901		LAB- BNP	229
1312180		LAB- URINE MICRO	217
99213		FC-EST PATIENT LV3 VISIT	216
1312073		LAB- URINALYSIS	208

Age (If Available)	Number of Primary Asthma Claims	Expenditure of Primary Asthma Claims
0-4	422	\$322,467
5-9	322	\$211,788
10-14	278	\$140,275
15-19	177	\$63,612
20-24	266	\$96,740
25-29	247	\$78,983
30-34	181	\$36,385
35-39	315	\$88,813
40-44	326	\$114,960
45-49	393	\$107,987
50-54	362	\$113,185
55-59	578	\$234,507
60-64	510	\$176,116
65-69	429	\$61,036
70-74	663	\$145,772
75-79	324	\$67,500
80-84	332	\$67,661
85-89	151	\$23,362
90+	58	\$12,944

<b>10 Most Common Prescription Claims and Associated Expenditure</b>			
<b>Drug Name</b>	<b>Total Claims</b>	<b>Total Expenditure</b>	<b>Total Expenditure</b>
<b>Ventolin HFA (Albuterol Sulfate)<sup>1</sup></b>	2,112	\$85,092	\$40.29
<b>Norvasc (Amlodipine Besylate)<sup>1</sup></b>	1,645	\$109,914	\$66.82
<b>Zithromax</b>	1,280	\$79,756	\$62.31
<b>Prednisone</b>	1,068	\$42,545	\$39.84
<b>Glucophage (Metformin)<sup>1</sup></b>	1,047	\$55,154	\$52.68
<b>Levonorgestrel and Ethinyl Estradiol</b>	1,025	\$44,799	\$43.71
<b>Diclofenac SR</b>	971	\$41,201	\$42.43
<b>Valtrex</b>	861	\$99,685	\$115.78
<b>Simvastatin<sup>1</sup></b>	847	\$42,527	\$50.21
<b>Zyrtec</b>	821	\$41,317	\$50.33

<sup>1</sup> Indicates prescription primarily prescribed for chronic respiratory, circulatory or endocrine disease. Other prescriptions listed may be prescribed for the control of chronic diseases, especially those associated with inflammation, but are not listed for this express use.