

PaTH Health Conditions

The following table represents the network-wide demographic breakdowns for 10 major health conditions. These counts represent unique patients with a diagnosis of the condition since 1/1/2016.

Condition	Anxiety Disorders	Asthma	Breast Cancer	Covid-19	Depressive Disorders	Diabetes Type II	Heart Failure	Hypertension	Liver Disease	Obesity
Total Patient Population	1,449,761	821,158	129,470	443,211	1,140,213	517,141	329,253	2,187,558	486,750	3,874,626
Age										
≤ 17	84385 (5.8%)	158311 (19.3%)	73 (0.1%)	52670 (11.9%)	41875 (3.7%)	2395 (0.5%)	4056 (1.2%)	12098 (0.6%)	7866 (1.6%)	157409 (4.1%)
18 - 44	617724 (42.6%)	304275 (37.1%)	7328 (5.7%)	146718 (33.1%)	457926 (40.2%)	42335 (8.2%)	18235 (5.5%)	248160 (11.3%)	121562 (25.0%)	1225796 (31.6%)
45 - 64	422913 (29.2%)	204138 (24.9%)	47707 (36.8%)	130113 (29.4%)	344804 (30.2%)	180103 (34.8%)	76701 (23.3%)	760715 (34.8%)	191853 (39.4%)	1300120 (33.6%)
≥ 65	324738 (22.4%)	154424 (18.8%)	74344 (57.4%)	113709 (25.7%)	295607 (25.9%)	292299 (56.5%)	230261 (69.9%)	1166582 (53.3%)	165469 (34.0%)	1191297 (30.7%)
Sex										
Female	975163 (67.3%)	499155 (60.8%)	128058 (98.9%)	254331 (57.4%)	764490 (67.0%)	249643 (48.3%)	158185 (48.0%)	1109546 (50.7%)	253812 (52.1%)	2196398 (56.7%)
Male	474465 (32.7%)	321941 (39.2%)	1408 (1.1%)	188837 (42.6%)	375602 (32.9%)	267476 (51.7%)	171056 (52.0%)	1077908 (49.3%)	232907 (47.8%)	1677879 (43.3%)
Unknown/Other	118 (0.0%)	33 (0.0%)	0 (0.0%)	26 (0.0%)	110 (0.0%)	0 (0.0%)	0 (0.0%)	98 (0.0%)	13 (0.0%)	349 (0.0%)
Race										
American Indian or Alaska Native	3450 (0.2%)	2261 (0.3%)	205 (0.2%)	1036 (0.2%)	2916 (0.3%)	1431 (0.3%)	694 (0.2%)	4420 (0.2%)	1225 (0.3%)	8817 (0.2%)
Asian	17111 (1.2%)	12340 (1.5%)	2553 (2.0%)	8891 (2.0%)	14029 (1.2%)	10510 (2.0%)	3234 (1.0%)	33996 (1.6%)	11976 (2.5%)	44244 (1.1%)
Black or African American	129862 (9.0%)	155946 (19.0%)	12622 (9.7%)	66634 (15.0%)	131146 (11.5%)	88333 (17.1%)	47806 (14.5%)	301256 (13.8%)	53274 (10.9%)	583766 (15.1%)
Native Hawaiian or Other Pacific Islander	1498 (0.1%)	1310 (0.2%)	48 (0.0%)	805 (0.2%)	1199 (0.1%)	664 (0.1%)	234 (0.1%)	2358 (0.1%)	604 (0.1%)	5001 (0.1%)
White	1103518 (76.1%)	565947 (68.9%)	98330 (75.9%)	314348 (70.9%)	889060 (78.0%)	358661 (69.4%)	245840 (74.7%)	1635022 (74.7%)	370174 (76.1%)	2844516 (73.4%)
Unknown/Other	194322 (13.4%)	83345 (10.1%)	15679 (12.1%)	51497 (11.6%)	101863 (8.9%)	57542 (11.1%)	31445 (9.6%)	210507 (9.6%)	49497 (10.2%)	388282 (10.0%)
Hispanic Ethnicity										
Yes	51064 (3.5%)	53245 (6.5%)	2407 (1.9%)	25191 (5.7%)	42827 (3.8%)	23358 (4.5%)	9041 (2.7%)	68296 (3.1%)	23738 (4.9%)	191816 (5.0%)
No	1290492 (89.0%)	706290 (86.0%)	118054 (91.2%)	384212 (86.7%)	1014847 (89.0%)	450046 (87.0%)	294352 (89.4%)	1930681 (88.3%)	428697 (88.1%)	3386508 (87.4%)
Unknown/Other	108205 (7.5%)	61614 (7.5%)	9009 (7.0%)	32900 (7.4%)	82539 (7.2%)	43737 (8.5%)	25860 (7.9%)	188582 (8.6%)	34315 (7.0%)	296302 (7.6%)

How these health conditions were chosen:

A list of health conditions was compiled from sources including past editions of the PaTH website, other PCORnet (National Patient-Centered Clinical Research Network) CRNs, the CDC, NIH and WHO.

The relevance of each condition was then calculated using Google Scholar and data from the PaTH CDM. Google Scholar was used to search for results where conditions appeared in both, the text and title of the article, between the years 2016-2020.

In the PaTH CDM, conditions were searched by ICD-10 codes for number of new diagnoses per year for the same period, 2016-2020. The percentage of change was calculated between 2016 and 2020 and between 2016 and 2019. The Google Scholar and CDM searches generated six categories. Each category was sorted and the top conditions were identified.

Conditions appearing on three or more of the six lists were included. COVID-19 was added due to special interest.

To produce the patient count for each condition, the seven PaTH sites queried their respective CDM for the number of unique patients with at least one diagnosis since 1/1/2016. These counts were further broken down by age group, sex, race and ethnicity.

*Note: Obesity is a challenging condition to identify because ICD codes for obesity are frequently excluded from a patient's EHR. To improve the quality of the counts, both ICD codes and BMI data were used to identify patients. Additionally, the PaTH patient counts include patients of all ages, accounting for lower numbers than are seen in adult-only counts.

University of Pittsburgh

Condition	Anxiety Disorders	Asthma	Breast Cancer	Covid-19	Depressive Dis.	Diabetes II	Heart Failure	Hypertension	Liver Disease	Obesity
Total Patient Population	561,669	284,353	34,205	120,210	430,026	156,921	100,030	731,351	155,567	1,139,631
Age										
≤ 17	37351 (6.7%)	53165 (18.7%)	T	21405 (17.8%)	15609 (3.6%)	587 (0.4%)	595 (0.6%)	2403 (0.3%)	2564 (1.6%)	40203 (3.5%)
18 - 44	227447 (40.5%)	105240 (37.0%)	1346 (3.9%)	36593 (30.4%)	164290 (38.2%)	11112 (7.1%)	3957 (4.0%)	75116 (10.3%)	35585 (22.9%)	346101 (30.4%)
45 - 64	161539 (28.8%)	68959 (24.3%)	11150 (32.6%)	32513 (27.0%)	130087 (30.3%)	51214 (32.6%)	20045 (20.0%)	245050 (33.5%)	59153 (38.0%)	372963 (32.7%)
≥ 65	135331 (24.1%)	56988 (20.0%)	21706 (63.5%)	29698 (24.7%)	120039 (27.9%)	94008 (59.9%)	75433 (75.4%)	408779 (55.9%)	58265 (37.5%)	380360 (33.4%)
Sex										
Female	377521 (67.2%)	169978 (59.8%)	33906 (99.1%)	68786 (57.2%)	291863 (67.9%)	75398 (48.0%)	48800 (48.8%)	369741 (50.6%)	82267 (52.9%)	642418 (56.4%)
Male	184134 (32.8%)	114365 (40.2%)	299 (0.9%)	51419 (42.8%)	138145 (32.1%)	81522 (52.0%)	51230 (51.2%)	361584 (49.4%)	73297 (47.1%)	497172 (43.6%)
Unknown/Other	14 (0.0%)	10 (0.0%)	(0.0%)	T	18 (0.0%)	T	(0.0%)	26 (0.0%)	T	41 (0.0%)
Race										
American Indian or Alaska Native	1062 (0.2%)	681 (0.2%)	48 (0.1%)	213 (0.2%)	918 (0.2%)	365 (0.2%)	210 (0.2%)	1228 (0.2%)	299 (0.2%)	1973 (0.2%)
Asian	4543 (0.8%)	3082 (1.1%)	313 (0.9%)	1799 (1.5%)	3640 (0.8%)	1794 (1.1%)	498 (0.5%)	6403 (0.9%)	2514 (1.6%)	7851 (0.7%)
Black or African American	41660 (7.4%)	44410 (15.6%)	1981 (5.8%)	12787 (10.6%)	40229 (9.4%)	17838 (11.4%)	9012 (9.0%)	65357 (8.9%)	12002 (7.7%)	99760 (8.8%)
Native Hawaiian or Other Pacific Islander	219 (0.0%)	139 (0.0%)		69 (0.1%)	198 (0.0%)	95 (0.1%)	27 (0.0%)	300 (0.0%)	93 (0.1%)	493 (0.0%)
White	491107 (87.4%)	223902 (78.7%)	30847 (90.2%)	97921 (81.5%)	368231 (85.6%)	130516 (83.2%)	86430 (86.4%)	623841 (85.3%)	133861 (86.0%)	962436 (84.5%)
Unknown/Other	23078 (4.1%)	12139 (4.3%)	1008 (2.9%)	7421 (6.2%)	16810 (3.9%)	6313 (4.0%)	3853 (3.9%)	34222 (4.7%)	6798 (4.4%)	67118 (5.9%)
Hispanic Ethnicity										
Yes	5662 (1.0%)	4276 (1.5%)	160 (0.5%)	1395 (1.2%)	4608 (1.1%)	1704 (1.1%)	550 (0.5%)	5244 (0.7%)	1634 (1.1%)	11476 (1.0%)
No	512862 (91.3%)	258307 (90.8%)	31856 (93.1%)	107826 (89.7%)	393222 (91.4%)	143121 (91.2%)	91092 (91.1%)	660751 (90.3%)	140518 (90.3%)	1017524 (89.3%)
Unknown/Other	43145 (7.7%)	21770 (7.7%)	2189 (6.4%)	10989 (9.1%)	32196 (7.5%)	12096 (7.7%)	8388 (8.4%)	65356 (8.9%)	13415 (8.6%)	110631 (9.7%)

Johns Hopkins University

Condition	Anxiety Disorders	Asthma	Breast Cancer	Covid-19	Depressive Disorders	Diabetes Type II	Heart Failure	Hypertension	Liver Disease	Obesity
Total Patient Population	129,966	96,458	27,530	81,069	100,254	66,495	39,333	265,678	46,993	630,251
Age										
≤ 17	9108 (7.0%)	26894 (27.9%)	T	8486 (10.5%)	5432 (5.4%)	456 (0.7%)	507 (1.3%)	1949 (0.7%)	1097 (2.3%)	20464 (3.2%)
18 - 44	58451 (45.0%)	32541 (33.7%)	1869 (6.8%)	24408 (30.1%)	41403 (41.3%)	5802 (8.7%)	2091 (5.3%)	28997 (10.9%)	10590 (22.5%)	198903 (31.6%)
45 - 64	36804 (28.3%)	21835 (22.6%)	11071 (40.2%)	25812 (31.8%)	28923 (28.8%)	23482 (35.3%)	8399 (21.4%)	91788 (34.5%)	19530 (41.6%)	221605 (35.2%)
≥ 65	25603 (19.7%)	15188 (15.7%)	14583 (53.0%)	22363 (27.6%)	24496 (24.4%)	36755 (55.3%)	28336 (72.0%)	142944 (53.8%)	15776 (33.6%)	189279 (30.0%)
Sex										
Female	90006 (69.3%)	57792 (59.9%)	27302 (99.2%)	47194 (58.2%)	66969 (66.8%)	32397 (48.7%)	19455 (49.5%)	140172 (52.8%)	24228 (51.6%)	372358 (59.1%)
Male	39892 (30.7%)	38643 (40.1%)	224 (0.8%)	33849 (41.8%)	33230 (33.1%)	34090 (51.3%)	19876 (50.5%)	125479 (47.2%)	22752 (48.4%)	257754 (40.9%)
Unknown/Other	68 (0.1%)	23 (0.0%)	T	26 (0.0%)	55 (0.1%)	T	T	27 (0.0%)	13 (0.0%)	139 (0.0%)
Race										
American Indian or Alaska Native	583 (0.4%)	418 (0.4%)	57 (0.2%)	283 (0.3%)	438 (0.4%)	292 (0.4%)	115 (0.3%)	917 (0.3%)	199 (0.4%)	2013 (0.3%)
Asian	2025 (1.6%)	1864 (1.9%)	785 (2.9%)	1455 (1.8%)	1604 (1.6%)	1444 (2.2%)	634 (1.6%)	5627 (2.1%)	1479 (3.1%)	10484 (1.7%)
Black or African American	26098 (20.1%)	37877 (39.3%)	5126 (18.6%)	23675 (29.2%)	26965 (26.9%)	24908 (37.5%)	12595 (32.0%)	81327 (30.6%)	12165 (25.9%)	197735 (31.4%)
Native Hawaiian or Other Pacific Islander	50 (0.0%)	39 (0.0%)	T	15 (0.0%)	41 (0.0%)	27 (0.0%)	12 (0.0%)	109 (0.0%)	19 (0.0%)	314 (0.0%)
White	87685 (67.5%)	44903 (46.6%)	18664 (67.8%)	42656 (52.6%)	61425 (61.3%)	31100 (46.8%)	22957 (58.4%)	150620 (56.7%)	26257 (55.9%)	345995 (54.9%)
Unknown/Other	13525 (10.4%)	11357 (11.8%)	2889 (10.5%)	12985 (16.0%)	9781 (9.8%)	8724 (13.1%)	3020 (7.7%)	27078 (10.2%)	6874 (14.6%)	73710 (11.7%)
Hispanic Ethnicity										
Yes	3950 (3.0%)	3401 (3.5%)	450 (1.6%)	3911 (4.8%)	3166 (3.2%)	1784 (2.7%)	679 (1.7%)	5416 (2.0%)	1653 (3.5%)	30177 (4.8%)
No	118177 (90.9%)	86375 (89.5%)	25500 (92.6%)	70716 (87.2%)	91641 (91.4%)	60381 (90.8%)	37061 (94.2%)	245951 (92.6%)	41899 (89.2%)	560563 (88.9%)
Unknown/Other	7839 (6.0%)	6682 (6.9%)	1580 (5.7%)	6442 (7.9%)	5447 (5.4%)	4330 (6.5%)	1593 (4.1%)	14311 (5.4%)	3441 (7.3%)	39511 (6.3%)

Geisinger Health System

Condition	Anxiety Disorders	Asthma	Breast Cancer	Covid-19	Depressive Disorders	Diabetes Type II	Heart Failure	Hypertension	Liver Disease	Obesity
Total Patient Population	341,709	177,743	18,668	117,582	248,994	111,461	70,572	474,080	102,325	715,576
Age										
≤ 17	19793 (5.8%)	35853 (20.2%)	73 (0.4%)	13079 (11.1%)	10683 (4.3%)	588 (0.5%)	515 (0.7%)	3398 (0.7%)	1913 (1.9%)	45055 (6.3%)
18 - 44	140951 (41.2%)	65835 (37.0%)	850 (4.6%)	39155 (33.3%)	99258 (39.9%)	8365 (7.5%)	2704 (3.8%)	55900 (11.8%)	28839 (28.2%)	228636 (32.0%)
45 - 64	101217 (29.6%)	42995 (24.2%)	5934 (31.8%)	33339 (28.4%)	73914 (29.7%)	35918 (32.2%)	14511 (20.6%)	164103 (34.6%)	39408 (38.5%)	227667 (31.8%)
≥ 65	79748 (23.3%)	33051 (18.6%)	11811 (63.3%)	32009 (27.2%)	65139 (26.2%)	66590 (59.7%)	52842 (74.9%)	250679 (52.9%)	32165 (31.4%)	214218 (29.9%)
Sex										
Female	227573 (66.6%)	107620 (60.5%)	18283 (97.9%)	67747 (57.6%)	165832 (66.6%)	53766 (48.2%)	34186 (48.4%)	236700 (49.9%)	54731 (53.5%)	388257 (54.3%)
Male	114134 (33.4%)	70111 (39.4%)	385 (2.1%)	49834 (42.4%)	83159 (33.4%)	57694 (51.8%)	36386 (51.6%)	237375 (50.1%)	47593 (46.5%)	327304 (45.7%)
Unknown/Other	T	T	0 (0.0%)	T	T	T	0 (0.0%)	T	T	15 (0.0%)
Race										
American Indian or Alaska Native	692 (0.2%)	428 (0.2%)	24 (0.1%)	266 (0.2%)	594 (0.2%)	244 (0.2%)	96 (0.1%)	748 (0.2%)	239 (0.2%)	1271 (0.2%)
Asian	2135 (0.6%)	1513 (0.9%)	146 (0.8%)	1178 (1.0%)	1548 (0.6%)	1108 (1.0%)	346 (0.5%)	4300 (0.9%)	1104 (1.1%)	4500 (0.6%)
Black or African American	11719 (3.4%)	12442 (7.0%)	431 (2.3%)	5615 (4.8%)	9884 (4.0%)	4639 (4.2%)	2104 (3.0%)	17623 (3.7%)	3690 (3.6%)	36821 (5.1%)
Native Hawaiian or Other Pacific Islander	1001 (0.3%)	965 (0.5%)	33 (0.2%)	656 (0.6%)	744 (0.3%)	421 (0.4%)	130 (0.2%)	1587 (0.3%)	399 (0.4%)	3423 (0.5%)
White	284399 (83.2%)	139745 (78.6%)	15623 (83.7%)	98536 (83.8%)	204049 (81.9%)	85072 (76.3%)	56955 (80.7%)	371288 (78.3%)	86318 (84.4%)	598611 (83.7%)
Unknown/Other	41763 (12.2%)	22641 (12.7%)	2411 (12.9%)	11331 (9.6%)	32175 (12.9%)	19977 (17.9%)	10941 (15.5%)	78534 (16.6%)	10575 (10.3%)	70950 (9.9%)
Hispanic Ethnicity										
Yes	14671 (4.3%)	14356 (8.1%)	449 (2.4%)	8272 (7.0%)	11526 (4.6%)	4836 (4.3%)	1558 (2.2%)	15945 (3.4%)	5831 (5.7%)	41033 (5.7%)
No	283389 (82.9%)	140609 (79.1%)	15727 (84.2%)	97825 (83.2%)	203877 (81.9%)	85964 (77.1%)	57456 (81.4%)	376292 (79.4%)	85589 (83.6%)	602051 (84.1%)
Unknown/Other	43649 (12.8%)	22769 (12.8%)	2492 (13.3%)	11485 (9.8%)	33591 (13.5%)	20661 (18.5%)	11558 (16.4%)	81843 (17.3%)	10905 (10.7%)	72492 (10.1%)

University of Michigan

Condition	Anxiety Disorders	Asthma	Breast Cancer	Covid-19	Depressive Disorders	Diabetes Type II	Heart Failure	Hypertension	Liver Disease	Obesity
Total Patient Population	110,447	66,755	13,483	23,901	93,044	45,560	30,530	167,608	41,104	401,131
Age										
≤ 17	7654 (6.9%)	15453 (23.1%)	T	3548 (14.8%)	4800 (5.2%)	175 (0.4%)	1706 (5.6%)	2272 (1.4%)	1105 (2.7%)	14372 (3.6%)
18 - 44	49972 (45.2%)	22673 (34.0%)	978 (7.3%)	7816 (32.7%)	40435 (43.5%)	4002 (8.8%)	2990 (9.8%)	17990 (10.7%)	10421 (25.4%)	125480 (31.3%)
45 - 64	29739 (26.9%)	15672 (23.5%)	5467 (40.5%)	6517 (27.3%)	25148 (27.0%)	16661 (36.6%)	7939 (26.0%)	55840 (33.3%)	16060 (39.1%)	135821 (33.9%)
≥ 65	23082 (20.9%)	12957 (19.4%)	7037 (52.2%)	6020 (25.2%)	22661 (24.4%)	24722 (54.3%)	17895 (58.6%)	91506 (54.6%)	13518 (32.9%)	125458 (31.3%)
Sex										
Female	74983 (67.9%)	40107 (60.1%)	13361 (99.1%)	13489 (56.4%)	62584 (67.3%)	20866 (45.8%)	13907 (45.6%)	82140 (49.0%)	21107 (51.4%)	220380 (54.9%)
Male	35455 (32.1%)	26646 (39.9%)	122 (0.9%)	10411 (43.6%)	30453 (32.7%)	24694 (54.2%)	16621 (54.4%)	85456 (51.0%)	19994 (48.6%)	180708 (45.0%)
Unknown/Other	T	T	0 (0.0%)	T	T	0 (0.0%)	T	12 (0.0%)	T	43 (0.0%)
Race										
American Indian or Alaska Native	641 (0.6%)	425 (0.6%)	39 (0.3%)	123 (0.5%)	547 (0.6%)	309 (0.7%)	161 (0.5%)	802 (0.5%)	264 (0.6%)	2328 (0.6%)
Asian	3088 (2.8%)	2287 (3.4%)	571 (4.2%)	898 (3.8%)	2648 (2.8%)	2005 (4.4%)	676 (2.2%)	5676 (3.4%)	2400 (5.8%)	7163 (1.8%)
Black or African American	9688 (8.8%)	10814 (16.2%)	902 (6.7%)	3514 (14.7%)	9598 (10.3%)	6937 (15.2%)	3898 (12.8%)	20740 (12.4%)	3496 (8.5%)	48224 (12.0%)
Native Hawaiian or Other Pacific Islander	93 (0.1%)	71 (0.1%)	15 (0.1%)	20 (0.1%)	86 (0.1%)	56 (0.1%)	29 (0.1%)	149 (0.1%)	34 (0.1%)	360 (0.1%)
White	91224 (82.6%)	49511 (74.2%)	10834 (80.4%)	17687 (74.0%)	75374 (81.0%)	33291 (73.1%)	24324 (79.7%)	131552 (78.5%)	31841 (77.5%)	318010 (79.3%)
Unknown/Other	5713 (5.2%)	3647 (5.5%)	1122 (8.3%)	1659 (6.9%)	4791 (5.1%)	2962 (6.5%)	1442 (4.7%)	8689 (5.2%)	3069 (7.5%)	25046 (6.2%)
Hispanic Ethnicity										
Yes	4353 (3.9%)	2803 (4.2%)	221 (1.6%)	1200 (5.0%)	3566 (3.8%)	1748 (3.8%)	740 (2.4%)	4180 (2.5%)	1798 (4.4%)	15496 (3.9%)
No	102702 (93.0%)	61972 (92.8%)	12012 (89.1%)	21834 (91.4%)	86488 (93.0%)	41705 (91.5%)	28668 (93.9%)	155303 (92.7%)	37242 (90.6%)	368395 (91.8%)
Unknown/Other	3392 (3.1%)	1980 (3.0%)	1250 (9.3%)	867 (3.6%)	2990 (3.2%)	2107 (4.6%)	1122 (3.7%)	8125 (4.8%)	2064 (5.0%)	17240 (4.3%)

Ohio State University

Condition	Anxiety Disorders	Asthma	Breast Cancer	Covid-19	Depressive Disorders	Diabetes Type II	Heart Failure	Hypertension	Liver Disease	Obesity
Total Patient Population	151,986	70,670	17,391	48,035	144,748	66,188	42,876	255,361	70,660	398,186
Age										
≤ 17	1409 (0.9%)	1977 (2.8%)	T	1715 (3.6%)	786 (0.5%)	#VALUE!	21 (0.0%)	63 (0.0%)	34 (0.0%)	2211 (0.6%)
18 - 44	77822 (51.2%)	32836 (46.5%)	1238 (7.1%)	22804 (47.5%)	66727 (46.1%)	6963 (10.5%)	3641 (8.5%)	35720 (14.0%)	18941 (26.8%)	129943 (32.6%)
45 - 64	45959 (30.2%)	22136 (31.3%)	7261 (41.8%)	14953 (31.1%)	46001 (31.8%)	26584 (40.2%)	13419 (31.3%)	97962 (38.4%)	29242 (41.4%)	146490 (36.8%)
≥ 65	26796 (17.6%)	13721 (19.4%)	8891 (51.1%)	8563 (17.8%)	31234 (21.6%)	32632 (49.3%)	25795 (60.2%)	121616 (47.6%)	22443 (31.8%)	119542 (30.0%)
Sex										
Female	101472 (66.8%)	46812 (66.2%)	17205 (98.9%)	27713 (57.7%)	95874 (66.2%)	32751 (49.5%)	20328 (47.4%)	130630 (51.2%)	37097 (52.5%)	233699 (58.7%)
Male	50498 (33.2%)	23854 (33.8%)	186 (1.1%)	20315 (42.3%)	48855 (33.8%)	33428 (50.5%)	22541 (52.6%)	124712 (48.8%)	33555 (47.5%)	164450 (41.3%)
Unknown/Other	16 (0.0%)	T	0 (0.0%)	T	19 (0.0%)	T	T	19 (0.0%)	T	37 (0.0%)
Race										
American Indian or Alaska Native	284 (0.2%)	158 (0.2%)	28 (0.2%)	80 (0.2%)	277 (0.2%)	128 (0.2%)	67 (0.2%)	368 (0.1%)	141 (0.2%)	611 (0.2%)
Asian	3137 (2.1%)	1387 (2.0%)	369 (2.1%)	1932 (4.0%)	2758 (1.9%)	2040 (3.1%)	439 (1.0%)	5268 (2.1%)	2158 (3.1%)	5966 (1.5%)
Black or African American	21629 (14.2%)	18487 (26.2%)	1534 (8.8%)	10188 (21.2%)	23760 (16.4%)	14594 (22.0%)	7910 (18.4%)	47343 (18.5%)	10112 (14.3%)	64780 (16.3%)
Native Hawaiian or Other Pacific Islander	68 (0.0%)	37 (0.1%)	#VALUE!	32 (0.1%)	76 (0.1%)	44 (0.1%)	20 (0.0%)	121 (0.0%)	34 (0.0%)	200 (0.1%)
White	119462 (78.6%)	46902 (66.4%)	14932 (85.9%)	31580 (65.7%)	110698 (76.5%)	44920 (67.9%)	32890 (76.7%)	191230 (74.9%)	54411 (77.0%)	305406 (76.7%)
Unknown/Other	7406 (4.9%)	3699 (5.2%)	521 (3.0%)	4223 (8.8%)	7179 (5.0%)	4462 (6.7%)	1550 (3.6%)	11031 (4.3%)	3804 (5.4%)	21223 (5.3%)
Hispanic Ethnicity										
Yes	3943 (2.6%)	2064 (2.9%)	228 (1.3%)	2391 (5.0%)	3801 (2.6%)	1990 (3.0%)	497 (1.2%)	4763 (1.9%)	2042 (2.9%)	11800 (3.0%)
No	146069 (96.1%)	67924 (96.1%)	16872 (97.0%)	44568 (92.8%)	139098 (96.1%)	62925 (95.1%)	41771 (97.4%)	247329 (96.9%)	67825 (96.0%)	381325 (95.8%)
Unknown/Other	1974 (1.3%)	682 (1.0%)	291 (1.7%)	1076 (2.2%)	1849 (1.3%)	1273 (1.9%)	608 (1.4%)	3269 (1.3%)	793 (1.1%)	5061 (1.3%)

Temple University

Condition	Anxiety Disorders	Asthma	Breast Cancer	Covid-19	Depressive Disorders	Diabetes Type II	Heart Failure	Hypertension	Liver Disease	Obesity
Total Patient Population	58,439	63,775	10,975	26,528	50,045	40,690	25,623	152,752	33,738	318,686
Age										
≤ 17	507 (0.9%)	6754 (10.6%)	#VALUE!	676 (2.5%)	315 (0.6%)	12 (0.0%)	3 (0.0%)	73 (0.0%)	59 (0.2%)	7972 (2.5%)
18 - 44	22146 (37.9%)	24736 (38.8%)	636 (5.8%)	8071 (30.4%)	17098 (34.2%)	3590 (8.8%)	1565 (6.1%)	17390 (11.4%)	8294 (24.6%)	112503 (35.3%)
45 - 64	21130 (36.2%)	19381 (30.4%)	4065 (37.0%)	9752 (36.8%)	19174 (38.3%)	16317 (40.1%)	8020 (31.3%)	58843 (38.5%)	14454 (42.8%)	111206 (34.9%)
≥ 65	14656 (25.1%)	12904 (20.2%)	6273 (57.2%)	8029 (30.3%)	13458 (26.9%)	20771 (51.0%)	16035 (62.6%)	76446 (50.0%)	10931 (32.4%)	87005 (27.3%)
Sex										
Female	39142 (67.0%)	40506 (63.5%)	10849 (98.9%)	15020 (56.6%)	32103 (64.1%)	20438 (50.2%)	12483 (48.7%)	79900 (52.3%)	15501 (45.9%)	189156 (59.4%)
Male	19293 (33.0%)	23264 (36.5%)	126 (1.1%)	11508 (43.4%)	17941 (35.8%)	20252 (49.8%)	13140 (51.3%)	72851 (47.7%)	18237 (54.1%)	129521 (40.6%)
Unknown/Other	T	T	0 (0.0%)	0 (0.0%)	T	0 (0.0%)	0 (0.0%)	T	0 (0.0%)	9 (0.0%)
Race										
American Indian or Alaska Native	38 (0.1%)	39 (0.1%)	9 (0.1%)	25 (0.1%)	29 (0.1%)	44 (0.1%)	11 (0.0%)	106 (0.1%)	17 (0.1%)	208 (0.1%)
Asian	972 (1.7%)	1111 (1.7%)	268 (2.4%)	711 (2.7%)	698 (1.4%)	1337 (3.3%)	399 (1.6%)	3917 (2.6%)	1181 (3.5%)	4898 (1.5%)
Black or African American	14286 (24.4%)	26123 (41.0%)	2400 (21.9%)	9049 (34.1%)	16409 (32.8%)	16998 (41.8%)	11062 (43.2%)	59663 (39.1%)	9974 (29.6%)	117632 (36.9%)
Native Hawaiian or Other Pacific Islander	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.0%)	1 (0.0%)	0 (0.0%)	2 (0.0%)
White	15022 (25.7%)	20579 (32.3%)	1584 (14.4%)	7604 (28.7%)	13092 (26.2%)	11277 (27.7%)	5543 (21.6%)	55714 (36.5%)	9745 (28.9%)	115608 (36.3%)
Unknown/Other	28121 (48.1%)	15923 (25.0%)	6714 (61.2%)	9139 (34.5%)	19817 (39.6%)	11034 (27.1%)	8607 (33.6%)	33352 (21.8%)	12821 (38.0%)	80338 (25.2%)
Hispanic Ethnicity										
Yes	12612 (21.6%)	18056 (28.3%)	654 (6.0%)	5731 (21.6%)	11435 (22.8%)	9069 (22.3%)	4107 (16.0%)	25575 (16.7%)	7913 (23.5%)	58401 (18.3%)
No	42927 (73.5%)	41271 (64.7%)	9755 (88.9%)	19323 (72.8%)	36406 (72.7%)	29561 (72.6%)	19673 (76.8%)	118584 (77.6%)	24094 (71.4%)	230207 (72.2%)
Unknown/Other	2900 (5.0%)	4448 (7.0%)	566 (5.2%)	#VALUE!	2204 (4.4%)	2060 (5.1%)	1843 (7.2%)	8594 (5.6%)	1731 (5.1%)	30078 (9.4%)

Penn State University

Condition	Anxiety Disorders	Asthma	Breast Cancer	Covid-19	Depressive Disorders	Diabetes Type II	Heart Failure	Hypertension	Liver Disease	Obesity
Total Patient Population	95,545	61,404	7,218	25,886	73,102	29,826	20,289	140,728	36,363	271,165
Age										
≤ 17	8563 (9.0%)	18215 (29.7%)	#VALUE!	3761 (14.5%)	4250 (5.8%)	577 (1.9%)	709 (3.5%)	1940 (1.4%)	1094 (3.0%)	27132 (10.0%)
18 - 44	40935 (42.8%)	20414 (33.2%)	411 (5.7%)	7871 (30.4%)	28715 (39.3%)	2501 (8.4%)	1287 (6.3%)	17047 (12.1%)	8892 (24.5%)	84230 (31.1%)
45 - 64	26525 (27.8%)	13160 (21.4%)	2759 (38.2%)	7227 (27.9%)	21557 (29.5%)	9927 (33.3%)	4368 (21.5%)	47129 (33.5%)	14006 (38.5%)	84368 (31.1%)
≥ 65	19522 (20.4%)	9615 (15.7%)	4043 (56.0%)	7027 (27.1%)	18580 (25.4%)	16821 (56.4%)	13925 (68.6%)	74612 (53.0%)	12371 (34.0%)	75435 (27.8%)
Sex										
Female	64466 (67.5%)	36340 (59.2%)	7152 (99.1%)	14382 (55.6%)	49265 (67.4%)	14027 (47.0%)	9026 (44.5%)	70263 (49.9%)	18881 (51.9%)	150130 (55.4%)
Male	31059 (32.5%)	25058 (40.8%)	66 (0.9%)	11501 (44.4%)	23819 (32.6%)	15796 (53.0%)	11262 (55.5%)	70451 (50.1%)	17479 (48.1%)	120970 (44.6%)
Unknown/Other	20 (0.0%)	T	0 (0.0%)	T	18 (0.0%)	T	T	14 (0.0%)	T	65 (0.0%)
Race										
American Indian or Alaska Native	150 (0.2%)	112 (0.2%)	T	46 (0.2%)	113 (0.2%)	49 (0.2%)	34 (0.2%)	251 (0.2%)	66 (0.2%)	413 (0.2%)
Asian	1211 (1.3%)	1096 (1.8%)	101 (1.4%)	918 (3.5%)	1133 (1.5%)	782 (2.6%)	242 (1.2%)	2805 (2.0%)	1140 (3.1%)	3382 (1.2%)
Black or African American	4782 (5.0%)	5793 (9.4%)	248 (3.4%)	1806 (7.0%)	4301 (5.9%)	2419 (8.1%)	1225 (6.0%)	9203 (6.5%)	1835 (5.0%)	18814 (6.9%)
Native Hawaiian or Other Pacific Islander	67 (0.1%)	59 (0.1%)	0 (0.0%)	13 (0.1%)	54 (0.1%)	21 (0.1%)	15 (0.1%)	91 (0.1%)	25 (0.1%)	209 (0.1%)
White	14619 (15.3%)	40405 (65.8%)	5846 (81.0%)	18364 (70.9%)	56191 (76.9%)	22485 (75.4%)	16741 (82.5%)	110777 (78.7%)	27741 (76.3%)	198450 (73.2%)
Unknown/Other	74716 (78.2%)	13939 (22.7%)	1014 (14.0%)	4739 (18.3%)	11310 (15.5%)	4070 (13.6%)	2032 (10.0%)	17601 (12.5%)	5556 (15.3%)	49897 (18.4%)
Hispanic Ethnicity										
Yes	5873 (6.1%)	8289 (13.5%)	245 (3.4%)	2291 (8.9%)	4725 (6.5%)	2227 (7.5%)	910 (4.5%)	7173 (5.1%)	2867 (7.9%)	23433 (8.6%)
No	84366 (88.3%)	49832 (81.2%)	6332 (87.7%)	22120 (85.5%)	64115 (87.7%)	26389 (88.5%)	18631 (91.8%)	126471 (89.9%)	31530 (86.7%)	226443 (83.5%)
Unknown/Other	5306 (5.6%)	3283 (5.3%)	641 (8.9%)	1475 (5.7%)	4262 (5.8%)	1210 (4.1%)	748 (3.7%)	7084 (5.0%)	1966 (5.4%)	21289 (7.9%)

ICD 10 Codes:

Anxiety Disorders = ('F06.4', 'F41.0', 'F41.1', 'F41.3', 'F41.8', 'F41.9')

Asthma = ('J45.20', 'J45.21', 'J45.22', 'J45.30', 'J45.31', 'J45.32', 'J45.40', 'J45.41', 'J45.42', 'J45.50', 'J45.51', 'J45.52', 'J45.901', 'J45.902', 'J45.909', 'J45.990', 'J45.991', 'J45.998')

Breast Cancer = ('D05.10', 'D05.11', 'D05.12', 'C50.011', 'C50.012', 'C50.019', 'C50.021', 'C50.022', 'C50.029', 'C50.111', 'C50.112', 'C50.119', 'C50.121', 'C50.122', 'C50.129', 'C50.211', 'C50.212', 'C50.219', 'C50.221', 'C50.222', 'C50.229', 'C50.311', 'C50.312', 'C50.319', 'C50.321', 'C50.322', 'C50.329', 'C50.411', 'C50.412', 'C50.419', 'C50.421', 'C50.422', 'C50.429', 'C50.511', 'C50.512', 'C50.519', 'C50.521', 'C50.522', 'C50.529', 'C50.611', 'C50.612', 'C50.619', 'C50.621', 'C50.622', 'C50.629', 'C50.811', 'C50.812', 'C50.819', 'C50.821', 'C50.822', 'C50.829', 'C50.911', 'C50.912', 'C50.919', 'C50.921', 'C50.922', 'C50.929', 'D05.00', 'D05.01', 'D05.02', 'D05.80', 'D05.81', 'D05.82', 'D05.90', 'D05.91', 'D05.92')

Covid-19 = ('U07.1', 'U07.2', 'U09.9', 'U49')

Depressive Disorders = ('F32.0', 'F32.1', 'F32.2', 'F32.3', 'F32.4', 'F32.8', 'F32.89', 'F32.9', 'F33.0', 'F33.1', 'F33.2', 'F33.3', 'F33.41', 'F33.8', 'F33.9', 'F34.1', 'F32.5', 'F33.40', 'F33.42', 'F32.A')

Diabetes Type II = ('E08.00', 'E08.01', 'E08.10', 'E08.11', 'E08.21', 'E08.22', 'E08.29', 'E08.311', 'E08.319', 'E08.321', 'E08.3211', 'E08.3212', 'E08.3213', 'E08.3219', 'E08.329', 'E08.3291', 'E08.3292', 'E08.3293', 'E08.3299', 'E08.331', 'E08.3311', 'E08.3312', 'E08.3313', 'E08.3319', 'E08.339', 'E08.3391', 'E08.3392', 'E08.3393', 'E08.3399', 'E08.341', 'E08.3411', 'E08.3412', 'E08.3413', 'E08.3419', 'E08.349', 'E08.3491', 'E08.3492', 'E08.3493', 'E08.3499', 'E08.351', 'E08.3511', 'E08.3512', 'E08.3513', 'E08.3519', 'E08.3521', 'E08.3522', 'E08.3523', 'E08.3529', 'E08.3531', 'E08.3532', 'E08.3533', 'E08.3539', 'E08.3541', 'E08.3542', 'E08.3543', 'E08.3549', 'E08.3551', 'E08.3552', 'E08.3553', 'E08.3559', 'E08.359', 'E08.3591', 'E08.3592', 'E08.3593', 'E08.3599', 'E08.36', 'E08.37X1', 'E08.37X2', 'E08.37X3', 'E08.37X9', 'E08.39', 'E08.40', 'E08.41', 'E08.42', 'E08.43', 'E08.44', 'E08.49', 'E08.51', 'E08.52', 'E08.59', 'E08.610', 'E08.618', 'E08.620', 'E08.621', 'E08.622', 'E08.628', 'E08.630', 'E08.638', 'E08.641', 'E08.649', 'E08.65', 'E08.69', 'E08.8', 'E11.00', 'E11.01', 'E11.10', 'E11.11', 'E11.21', 'E11.22', 'E11.29', 'E11.311', 'E11.319', 'E11.321', 'E11.3211', 'E11.3212', 'E11.3213', 'E11.3219', 'E11.329', 'E11.3291', 'E11.3292', 'E11.3293', 'E11.3299', 'E11.331', 'E11.3311', 'E11.3312', 'E11.3313', 'E11.3319', 'E11.339', 'E11.3391', 'E11.3392', 'E11.3393', 'E11.3399', 'E11.341', 'E11.3411', 'E11.3412', 'E11.3413', 'E11.3419', 'E11.349', 'E11.3491', 'E11.3492', 'E11.3493', 'E11.3499', 'E11.351', 'E11.3511', 'E11.3512', 'E11.3513', 'E11.3519', 'E11.3521', 'E11.3522', 'E11.3523', 'E11.3529', 'E11.3531', 'E11.3532', 'E11.3533', 'E11.3539', 'E11.3541', 'E11.3542', 'E11.3543', 'E11.3549', 'E11.3551', 'E11.3552', 'E11.3553', 'E11.3559', 'E11.359', 'E11.3591', 'E11.3592', 'E11.3593', 'E11.3599', 'E11.36', 'E11.37X1', 'E11.37X2', 'E11.37X3', 'E11.37X9', 'E11.39', 'E11.40', 'E11.41', 'E11.42', 'E11.43', 'E11.44', 'E11.49', 'E11.51', 'E11.52', 'E11.59', 'E11.610', 'E11.618', 'E11.620', 'E11.621', 'E11.622', 'E11.628', 'E11.630', 'E11.638', 'E11.641', 'E11.649', 'E11.65', 'E11.69', 'E11.8', 'E13.00', 'E13.01', 'E13.10',

'E13.11', 'E13.21', 'E13.22', 'E13.29', 'E13.311', 'E13.319', 'E13.321', 'E13.3211', 'E13.3212', 'E13.3213', 'E13.3219', 'E13.329', 'E13.3291', 'E13.3292', 'E13.3293', 'E13.3299', 'E13.331', 'E13.3311', 'E13.3312', 'E13.3313', 'E13.3319', 'E13.339', 'E13.3391', 'E13.3392', 'E13.3393', 'E13.3399', 'E13.341', 'E13.3411', 'E13.3412', 'E13.3413', 'E13.3419', 'E13.349', 'E13.3491', 'E13.3492', 'E13.3493', 'E13.3499', 'E13.351', 'E13.3511', 'E13.3512', 'E13.3513', 'E13.3519', 'E13.3521', 'E13.3522', 'E13.3523', 'E13.3529', 'E13.3531', 'E13.3532', 'E13.3533', 'E13.3539', 'E13.3541', 'E13.3542', 'E13.3543', 'E13.3549', 'E13.3551', 'E13.3552', 'E13.3553', 'E13.3559', 'E13.359', 'E13.3591', 'E13.3592', 'E13.3593', 'E13.3599', 'E13.36', 'E13.37X1', 'E13.37X2', 'E13.37X3', 'E13.37X9', 'E13.39', 'E13.40', 'E13.41', 'E13.42', 'E13.43', 'E13.44', 'E13.49', 'E13.51', 'E13.52', 'E13.59', 'E13.610', 'E13.618', 'E13.620', 'E13.621', 'E13.622', 'E13.628', 'E13.630', 'E13.638', 'E13.641', 'E13.649', 'E13.65', 'E13.69', 'E13.8')

Heart Failure = ('I09.81', 'I11.0', 'I13.0', 'I13.2', 'I50.40', 'I50.41', 'I50.42', 'I50.43', 'I50.810', 'I50.811', 'I50.812', 'I50.813', 'I50.814', 'I50.82', 'I50.83', 'I50.84', 'I50.89', 'I50.9', 'I50.30', 'I50.31', 'I50.32', 'I50.33', 'I50.20', 'I50.21', 'I50.22', 'I50.23', 'I51.9', 'I50.1', 'I50.81', 'Z95.811', 'Z95.812')

Hypertension = ('I10', 'O10.011', 'O10.012', 'O10.013', 'O10.019', 'O10.02', 'O10.03', 'O10.911', 'O10.912', 'O10.913', 'O10.919', 'O10.92', 'O10.93', 'H35.031', 'H35.032', 'H35.033', 'I11.0', 'I11.9', 'I12.0', 'I12.9', 'I13.0', 'I13.10', 'I13.11', 'I13.2', 'I15.0', 'I15.1', 'I15.2', 'I15.8', 'I15.9', 'I16.0', 'I16.1', 'I16.9', 'I67.4', 'O10.111', 'O10.112', 'O10.113', 'O10.119', 'O10.12', 'O10.13', 'O10.211', 'O10.212', 'O10.213', 'O10.219', 'O10.22', 'O10.23', 'O10.311', 'O10.312', 'O10.313', 'O10.319', 'O10.32', 'O10.33', 'O10.411', 'O10.412', 'O10.413', 'O10.419', 'O10.42', 'O10.43', 'O11.1', 'O11.2', 'O11.3', 'O11.4', 'O11.5', 'O11.9')

Liver Disease = ('K70.40', 'K70.41', 'K72.00', 'K72.01', 'K72.10', 'K72.11', 'K72.90', 'K72.91', 'K91.82', 'A52.74', 'B67.0', 'B67.5', 'K70.0', 'K70.2', 'K70.30', 'K70.31', 'K70.9', 'K71.0', 'K71.10', 'K71.11', 'K71.7', 'K71.8', 'K71.9', 'K74.0', 'K74.00', 'K74.01', 'K74.02', 'K74.1', 'K74.2', 'K74.3', 'K74.4', 'K74.5', 'K74.60', 'K74.69', 'K75.1', 'K75.89', 'K75.9', 'K76.0', 'K76.1', 'K76.2', 'K76.3', 'K76.4', 'K76.5', 'K76.6', 'K76.7', 'K76.81', 'K76.89', 'K76.9', 'K77', 'O26.611', 'O26.612', 'O26.613', 'O26.619', 'O26.62', 'O26.63', 'K71.2', 'K71.3', 'K71.4', 'K71.50', 'K71.51', 'K71.6', 'K73.0', 'K73.1', 'K73.2', 'K73.8', 'K73.9', 'K75.2', 'K75.3', 'K75.4', 'K75.81', 'A51.45', 'B00.81', 'B15.0', 'B15.9', 'B16.0', 'B16.1', 'B16.2', 'B16.9', 'B17.0', 'B17.10', 'B17.11', 'B17.2', 'B17.8', 'B17.9', 'B18.0', 'B18.1', 'B18.2', 'B18.8', 'B18.9', 'B19.0', 'B19.10', 'B19.11', 'B19.20', 'B19.21', 'B19.9', 'B25.1', 'B26.81', 'B58.1', 'K70.10', 'K70.11', 'O98.411', 'O98.412', 'O98.413', 'O98.419', 'O98.42', 'O98.43', 'P35.3', 'K71', 'K71.0', 'K71.1', 'K71.10', 'K71.11', 'K71.2', 'K71.5', 'K71.8', 'K71.9')

Obesity = ('E66.01', 'E66.09', 'E66.1', 'E66.2', 'E66.8', 'E66.9', 'O99.210', 'O99.211', 'O99.212', 'O99.213', 'O99.214', 'O99.215', 'Z68.30', 'Z68.31', 'Z68.32', 'Z68.33', 'Z68.34', 'Z68.35', 'Z68.36', 'Z68.37', 'Z68.38', 'Z68.39', 'Z68.41', 'Z68.42', 'Z68.43', 'Z68.44', 'Z68.45', 'Z68.54')

OR

BMI 30 – 90