

Electronic Supplementary Material for: A Linked Electronic Medical Record-Claims Analysis of the Clinical and Economic Outcomes of Erosive Esophagitis in the United States

In: Advances in Therapy

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Table S1. Codes Used in Study Execution

Table S2. Demographic and Clinical Characteristics of All Cohorts

Table S3. Full Unadjusted Annualized^a Healthcare Costs

Table S4. Sensitivity Analysis of Patients with Esophagogastroduodenoscopy (EGD) in the Baseline Period

Figure S1. Sankey Diagram of the First Four Lines of Therapy

Table S1. Codes Used in Study Execution

Category	Description	Code Type	Code ^a
Inclusion Criteria	GERD with esophagitis	ICD-10-CM	K21.0*
General Clinical Conditions	Abdominal pain and/or tenderness	ICD-9-CM	789.0x, 789.6x
		ICD-10-CM	R10.0, R10.1*, R10.3*, R10.8*, R10.9
	Anxiety	ICD-9-CM	300.0x, 300.2x, 300.3, 300.4, 300.5, 300.6, 300.7
		ICD-10-CM	F40*, F41*, F42*, F43*
	Asthma	ICD-9-CM	493.x
		ICD-10-CM	J45*
	Cancer (any)	ICD-9-CM	140.x, 141.x, 142.x, 143.x, 144.x, 145.x, 146.x, 147.x, 148.x, 149.x, 150.x, 151.x, 152.x, 153.x, 154.x, 155.x, 156.x, 157.x, 158.x, 159.x, 160.x, 161.x, 162.x, 163.x, 164.x, 165.x, 170.x, 171.x, 172.x, 173.x, 174.x, 175.x, 176.x, 179, 180.x, 181, 182.x, 183.x, 184.x, 185, 186.x, 187.x, 188.x, 189.x, 190.x, 191.x, 192.x, 193, 194.x, 195.x, 196.x, 197.x, 198.x, 199.x, 200.x, 201.x, 202.x, 203.x, 204.x, 205.x, 206.x, 207.x, 208.x, 209.0x, 209.1x, 209.2x, 209.3x, 209.7x
		ICD-10-CM	C00*, C01, C02*, C03*, C04*, C05*, C06*, C07, C08*, C09*, C10*, C11*, C12, C13*, C14*, C15*, C16*, C17*, C18*, C19, C20, C21*, C22*, C23, C24*, C25*, C26*, C30*, C31*, C32*, C33, C34*, C37, C38*, C39*, C40*, C41*, C43*, C44*, C45*, C46*, C47*, C48*, C49*, C50*, C51*, C52, C53*, C54*, C55, C56*, C57*, C58, C60*, C61, C62*, C63*, C64*, C65*, C66*, C67*, C68*, C69*, C70*, C71*, C72*, C73, C74*, C75*, C7A*, C7B*, C76*, C77*, C78*, C79*, C80*, C81*, C82*, C83*, C84*, C85*, C86*, C88*, C90*, C91*, C92*, C93*, C94*, C95*, C96*
	Cardiovascular disease	ICD-9-CM	390, 391.x, 392.x, 393, 394.x, 395.x, 396.x, 397.x, 398.x, 401.x, 402.x, 403.x, 404.x, 405.x, 410.x, 411.x, 412, 413.x, 414.x, 415.x, 416.x, 417.x, 420.x, 421.x, 422.x, 423.x, 424.x, 425.x, 426.x, 427.x, 428.x, 429.x, 430, 431, 432.x, 433.x, 434.x, 435.x, 436, 437.x, 438.x, 440.x, 441.x, 442.x, 443.x, 444.x, 445.x, 446.x, 447.x, 448.x, 449, 451.x, 452, 453.x, 454.x, 455.x, 456.x, 457.x, 458.x, 459.x
		ICD-10-CM	I05*, I06*, I07*, I08*, I09*, I10*, I11*, I12*, I13*, I15*, I16*, I20*, I21*, I22*, I23*, I24*, I25*, I26*, I27*, I28*, I30*, I31*, I32*, I33*, I34*, I35*, I36*, I37*, I38*, I39*, I40*, I41*, I42*, I43*, I44*, I45*, I46*, I47*, I48*, I49*, I50*, I51*, I52*, I60*, I61*, I62*, I63*, I65*, I66*, I67*, I68*, I69*, I70*, I71*, I72*, I73*, I74*, I75*, I76*, I77*, I78*, I79*, I80*, I81*, I82*, I83*, I85*, I86*, I87*, I88*, I89*, I95*, I96*, I97*, I99*
Chest pain	ICD-9-CM	786.5x	

	ICD-10-CM	R07.1, R07.2, R07.8*, R07.9
Chronic pain	ICD-9-CM	338.2x, 338.4
	ICD-10-CM	G89.2*, G89.4
Depression	ICD-9-CM	296.2x, 296.3x, 300.4, 309.0
	ICD-10-CM	F32*, F33*, F43.1, F43.21, F53.0
Diabetes, type 1	ICD-9-CM	250.01, 250.03, 250.11, 250.13, 250.21, 250.23, 250.31, 250.33, 250.41, 250.43, 250.51, 250.53, 250.61, 250.63, 250.71, 250.73, 250.81, 250.83, 250.91, 250.93
	ICD-10-CM	E10*, O24.0x
Diabetes, type 2	ICD-9-CM	250.00, 250.02, 250.10, 250.12, 250.20, 250.22, 250.30, 250.32, 250.40, 250.42, 250.50, 250.52, 250.60, 250.62, 250.70, 250.72, 250.80, 250.82, 250.90, 250.92
	ICD-10-CM	E11*, O24.1*
Fatigue	ICD-9-CM	780.71, 780.79
	ICD-10-CM	R53.82, R53.83
Hypercholesterolemia	ICD-9-CM	272
	ICD-10-CM	E78.0*
Hyperlipidemia	ICD-9-CM	272.2, 272.4
	ICD-10-CM	E78.2, E78.4* E78.5
Hypertension (primary)	ICD-9-CM	401.x
	ICD-10-CM	I10
Hypothyroidism	ICD-9-CM	243, 244.x
	ICD-10-CM	E00*, E01*. E02, E03*, E89.0
Obesity diagnosis	ICD-9-CM	278.x, 649.1x, V85.3x, V85.4x
	ICD-10-CM	E66*, O99.2*, Z68.3*, Z68.4*,
Opioid Use	ICD-9-CM	304.0x, 305.5x
	ICD-10-CM	F11*
Osteoarthritis	ICD-9-CM	715.x
	ICD-10-CM	M15*, M16*, M17*, M18*, M19*
Shortness of breath	ICD-9-CM	786.02, 786.05
	ICD-10-CM	R06.0*
Sleep disorder	ICD-9-CM	78.5x

		ICD-10-CM	F51.8, F51.9, G47*
GI-related Comorbidities	Achalasia	ICD-9-CM	530
		ICD-10-CM	K22.0
	Aspiration pneumonia	ICD-9-CM	507.x
		ICD-10-CM	J69*
	Barrett's esophagus	ICD-9-CM	530.85
		ICD-10-CM	K22.7*
	Dyskinesia of Esophagus	ICD-9-CM	530.5
		ICD-10-CM	K22.4
	Esophagogastric junction outflow obstruction	ICD-9-CM	530.3
		ICD-10-CM	K22.2
	Foregut cancer	ICD-9-CM	150.x, 151.x, 155.x, 156.x, 157.x, 159.1
		ICD-10-CM	C15*, C16*, C22*, C23, C24*, C25*, C26.1
	Gastroparesis	ICD-9-CM	536.3
		ICD-10-CM	K31.84
	Helicobacter pylori	ICD-9-CM	041.86
		ICD-10-CM	B96.81
Hiatal hernia	ICD-9-CM	551.3, 552.3, 553.3	
	ICD-10-CM	K44*	
Peptic ulcer	ICD-9-CM	530.2x, 531.x, 532.x, 533.x	
	ICD-10-CM	K25*, K26*, K27*, K21.1*,	
GI-related Symptom	Chronic Cough	ICD-9-CM	786.2
		ICD-10-CM	R05.3
	Chronic laryngitis	ICD-9-CM	476.0
		ICD-10-CM	J37.0
	Dyspepsia, NOS	ICD-9-CM	789.06
		ICD-10-CM	R10.13
	Dysphagia	ICD-9-CM	787.2x
		ICD-10-CM	R131.1*
	Functional dyspepsia	ICD-9-CM	536.8

		ICD-10-CM	K30
	Heartburn	ICD-9-CM	787.1
		ICD-10-CM	R12
Procedures	Diagnostic EGD	CPT	43191, 43193, 43197, 43198, 43200, 43202, 43206, 43231, 43232, 43235, 43237, 43238, 43239, 43242, 43252, 43253, 43259, 0651T, 0652T, 0653T, 0654T

CPT, Current Procedural Terminology; ICD-9-CM, International Classification of Diseases, 9th Edition, Clinical Modification; ICD-10-CDM, International Classification of Diseases, 10th Edition,

a For the code lists below, x is used as a wildcard for ICD-9 codes and * is used as a wildcard for ICD-10 codes

Table S2. Demographic and Clinical Characteristics of All Cohorts

	All EE Patients		0 PPI LOTs		1 PPI LOT		2 PPI LOTs		3+ PPI LOTs	
	N = 158,347		N = 56,275		N = 71,958		N = 14,985		N = 15,129	
Age, Index Date (Mean, SD)	56.9	14.3	57.4	14.5	57.0	14.2	55.8	14.4	56.1	14.0
Sex (N,%)										
Male	61,583	38.9%	23,389	41.6%	28,324	39.4%	5,194	34.7%	4,676	30.9%
Female	96,692	61.1%	32,857	58.4%	43,601	60.6%	9,787	65.3%	10,447	69.1%
Unknown/Not Reported	72	0.0%	29	0.1%	33	0.0%	4	0.0%	6	0.0%
Race (N,%)										
White	96,415	60.9%	34,285	60.9%	44,945	62.5%	8,782	58.6%	8,403	55.5%
Black	10,922	6.9%	3,725	6.6%	4,656	6.5%	1,123	7.5%	1,418	9.4%
Asian	4,022	2.5%	1,655	2.9%	1,550	2.2%	388	2.6%	429	2.8%
Other	3,646	2.3%	1,163	2.1%	1,614	2.2%	394	2.6%	475	3.1%
Unknown/Not Reported	43,342	27.4%	15,447	27.4%	19,193	26.7%	4,298	28.7%	4,404	29.1%
Ethnicity (N,%)										
Hispanic	11,469	7.2%	3,264	5.8%	5,114	7.1%	1,364	9.1%	1,727	11.4%
Non-Hispanic	129,671	81.9%	46,938	83.4%	58,793	81.7%	12,025	80.2%	11,915	78.8%
Unknown/Not Reported	17,207	10.9%	6,073	10.8%	8,051	11.2%	1,596	10.7%	1,487	9.8%
Geographic Region (N,%)										
Northeast	45,889	29.0%	16,399	29.1%	21,125	29.4%	4,310	28.8%	4,055	26.8%
Midwest	26,332	16.6%	8,286	14.7%	13,118	18.2%	2,572	17.2%	2,356	15.6%
South	61,920	39.1%	23,105	41.1%	26,694	37.1%	5,809	38.8%	6,312	41.7%
West	20,275	12.8%	7,109	12.6%	9,302	12.9%	1,902	12.7%	1,962	13.0%
Other/Unknown	3,931	2.5%	1,376	2.4%	1,719	2.4%	392	2.6%	444	2.9%
Body Mass Index (BMI) (Mean, SD)										
<18.5 (underweight)	29,739	18.8%	11,329	20.1%	12,959	18.0%	2,742	18.3%	2,709	17.9%
18.5-24.9 (healthy weight)	47,943	30.3%	17,529	31.1%	21,723	30.2%	4,386	29.3%	4,305	28.5%
25.0-29.9 (overweight)	63,926	40.4%	21,019	37.4%	30,031	41.7%	6,314	42.1%	6,562	43.4%
≥30 (obese)	14,703	9.3%	5,637	10.0%	6,395	8.9%	1,337	8.9%	1,334	8.8%

	All EE Patients		0 PPI LOTs		1 PPI LOT		2 PPI LOTs		3+ PPI LOTs	
	N = 158,347		N = 56,275		N = 71,958		N = 14,985		N = 15,129	
General Clinical Conditions in the 12 Month Baseline Period (N,%)										
Opioid Use ^a	53,322	33.7%	10,698	19.0%	27,374	38.0%	6,798	45.4%	8,452	55.9%
Abdominal pain	54,477	34.4%	15,187	27.0%	24,621	34.2%	6,607	44.1%	8,062	53.3%
Chest pain	36,624	23.1%	9,747	17.3%	16,633	23.1%	4,568	30.5%	5,676	37.5%
Anxiety	37,665	23.8%	10,165	18.1%	17,591	24.4%	4,423	29.5%	5,486	36.3%
Depression	28,755	18.2%	7,396	13.1%	13,567	18.9%	3,336	22.3%	4,456	29.5%
Cardiovascular disease	96,301	60.8%	31,188	55.4%	44,692	62.1%	9,592	64.0%	10,829	71.6%
Hypertension	80,647	50.9%	25,663	45.6%	37,625	52.3%	8,060	53.8%	9,299	61.5%
Shortness of breath	28,106	17.7%	7,468	13.3%	12,854	17.9%	3,420	22.8%	4,364	28.8%
Chronic pain	16,601	10.5%	3,756	6.7%	7,810	10.9%	2,013	13.4%	3,022	20.0%
Osteoarthritis	37,247	23.5%	10,810	19.2%	17,569	24.4%	3,951	26.4%	4,917	32.5%
Hyperlipidemia	68,674	43.4%	22,010	39.1%	32,134	44.7%	6,879	45.9%	7,651	50.6%
Diabetes (Type I or Type II)	36,624	23.1%	11,225	19.9%	16,991	23.6%	3,725	24.9%	4,683	31.0%
Asthma	22,531	14.2%	6,299	11.2%	10,351	14.4%	2,534	16.9%	3,347	22.1%
Sleep disorder	31,866	20.1%	9,397	16.7%	14,896	20.7%	3,453	23.0%	4,120	27.2%
Obesity (diagnosis or BMI \geq 30)	73,809	46.6%	23,840	42.4%	34,669	48.2%	7,406	49.4%	7,894	52.2%
Fatigue	27,628	17.4%	8,218	14.6%	12,663	17.6%	3,134	20.9%	3,613	23.9%
Hypothyroidism	29,987	18.9%	9,746	17.3%	13,730	19.1%	3,119	20.8%	3,392	22.4%
Hypercholesterolemia	24,932	15.7%	8,126	14.4%	11,420	15.9%	2,501	16.7%	2,885	19.1%
Cancer (any)	15,844	10.0%	5,705	10.1%	7,252	10.1%	1,452	9.7%	1,435	9.5%
GI-related Comorbidities in the 36 Month Follow-up Period (N,%)										
Hiatal hernia	50,575	31.9%	14,437	25.7%	23,502	32.7%	5,868	39.2%	6,768	44.7%
Peptic ulcer	19,879	12.6%	4,709	8.4%	9,220	12.8%	2,645	17.7%	3,305	21.8%
Barrett's esophagus	19,232	12.1%	5,690	10.1%	9,463	13.2%	1,958	13.1%	2,121	14.0%
Esophagogastric junction outflow obstruction	13,923	8.8%	3,894	6.9%	6,577	9.1%	1,648	11.0%	1,804	11.9%
Helicobacter pylori	6,219	3.9%	1,417	2.5%	2,654	3.7%	852	5.7%	1,296	8.6%
Gastroparesis	5,275	3.3%	1,104	2.0%	2,252	3.1%	743	5.0%	1,176	7.8%

	All EE Patients		0 PPI LOTs		1 PPI LOT		2 PPI LOTs		3+ PPI LOTs	
	N = 158,347		N = 56,275		N = 71,958		N = 14,985		N = 15,129	
Dyskinesia of Esophagus	3,774	2.4%	838	1.5%	1,691	2.3%	510	3.4%	735	4.9%
Aspiration pneumonia	2,123	1.3%	503	0.9%	929	1.3%	292	1.9%	399	2.6%
Foregut cancer ¹	1,646	1.0%	447	0.8%	714	1.0%	228	1.5%	257	1.7%
Achalasia	943	0.6%	227	0.4%	408	0.6%	122	0.8%	186	1.2%
GI-related Symptoms in the 36 Month Follow-up Period (N,%)										
Dyspepsia	39,162	24.7%	9,800	17.4%	17,237	24.0%	5,262	35.1%	6,863	45.4%
Dysphagia	37,112	23.4%	10,404	18.5%	16,947	23.6%	4,470	29.8%	5,291	35.0%
Heartburn	19,581	12.4%	5,489	9.8%	8,885	12.3%	2,354	15.7%	2,853	18.9%
Functional dyspepsia	11,424	7.2%	3,168	5.6%	4,753	6.6%	1,490	9.9%	2,013	13.3%
Chronic cough	9,845	6.2%	3,230	5.7%	4,535	6.3%	1,006	6.7%	1,074	7.1%
Chronic laryngitis	1,877	1.2%	583	1.0%	787	1.1%	229	1.5%	278	1.8%

EE, Erosive esophagitis; LOT, line of therapy; PPI, proton pump inhibitor; SD, standard deviation

Table S3. Full Unadjusted Annualized^a Healthcare Costs

	All EE Patients		0 PPI LOTs		1 PPI LOT		2 PPI LOTs		3+ PPI LOTs	
	N = 158,347		N = 56,275		N = 71,958		N = 14,985		N = 15,129	
All-cause Healthcare Utilization and Costs										
Inpatient										
Had an admission (N,%)	42,394	26.8%	11,555	20.5%	19,732	27.4%	4,978	33.2%	6,129	40.5%
Number of admissions (Mean, SD)	0.19	0.55	0.12	0.4	0.19	0.54	0.25	0.6	0.38	0.89
Length of stay per admission (Mean, SD)	5.0	7.4	5.0	8.2	4.9	5.2	5.1	9.3	5.2	9.8
Inpatient costs (Mean, SD)	\$3,734	\$44,848	\$2,552	\$34,092	\$3,809	\$47,422	\$5,423	\$66,294	\$6,105	\$40,812
Emergency Department (ED)										
Had an ED visit (N,%)	81,993	51.8%	24,242	43.1%	37,893	52.7%	9,186	61.3%	10,672	70.5%
Number of ED visits (Mean, SD)	0.71	2.0	0.41	1.1	0.68	1.9	0.98	2.2	1.70	4.0
ED visit costs (Mean, SD)	\$1,006	\$3,824	\$543	\$2,387	\$989	\$3,577	\$1,365	\$3,757	\$2,453	\$7,347
Office Visits										
Had an office visit (N,%)	157,178	99.3%	55,617	98.8%	71,531	99.4%	14,936	99.7%	15,094	99.8%
Number of office visits (Mean, SD)	15.0	14.7	12.2	13.0	15.3	14.6	17.7	15.4	21.4	17.5
Office visit costs (Mean, SD)	\$4,010	\$11,266	\$3,011	\$9,794	\$4,186	\$11,719	\$4,950	\$11,940	\$5,955	\$12,993
Office visit costs (Median, IQR)	\$1,502	\$3,094	\$1,058	\$2,181	\$1,623	\$3,190	\$2,022	\$3,955	\$2,690	\$4,855
Other Medical Services										
Had an other medical service (N, %)	155,725	98.3%	54,749	97.3%	71,019	98.7%	14,884	99.3%	15,073	99.6%
Number of other medical services (Mean, SD)	11.4	24.3	8.1	18.0	11.4	23.4	14.2	27.5	20.5	38.8
Other medical service costs (Mean, SD)	\$5,976	\$31,789	\$4,565	\$34,169	\$6,024	\$28,859	\$7,624	\$31,414	\$9,357	\$35,692
Other medical service costs (Median, IQR)	\$1,355	\$3,164	\$1,017	\$2,403	\$1,398	\$3,159	\$1,790	\$3,990	\$2,448	\$5,506
Pharmacy										
Had a pharmacy claim (N,%)	143,187	90.4%	42,126	74.9%	71,015	98.7%	14,933	99.7%	15,113	99.9%
Number of pharmacy claims (Mean, SD)	31.3	40.7	12.4	22.1	36.1	39.3	44.1	43.4	66.7	58.8
Pharmacy costs (Mean, SD)	\$2,127	\$36,278	\$961	\$33,469	\$2,326	\$40,518	\$3,180	\$36,828	\$4,476	\$21,081
Pharmacy costs (Median, IQR)	\$208	\$1,077	\$36	\$281	\$332	\$1,350	\$496	\$1,911	\$951	\$3,291
Total										
Total healthcare costs (Mean, SD)	\$16,853	\$70,507	\$11,633	\$61,903	\$17,335	\$73,357	\$22,542	\$86,999	\$28,346	\$66,488
Total healthcare costs (Median, IQR)	\$5,772	\$12,527	\$3,651	\$8,030	\$6,298	\$12,790	\$8,476	\$16,499	\$12,639	\$23,440

	All EE Patients		0 PPI LOTs		1 PPI LOT		2 PPI LOTs		3+ PPI LOTs	
	N = 158,347		N = 56,275		N = 71,958		N = 14,985		N = 15,129	
EE-related Healthcare Utilization and Costs										
Inpatient										
Had an admission (N,%)	1,520	1.0%	262	0.5%	682	0.9%	227	1.5%	349	2.3%
Number of admissions (Mean, SD)	0.00	0.04	0.00	0.0	0.00	0.0	0.01	0.0	0.01	0.1
Length of stay per admission (Mean, SD)	6.5	22.1	6.6	23.0	5.3	5.4	7.7	25.3	7.8	35.5
Inpatient costs (Mean, SD)	\$28	\$2,803	\$28	\$3,508	\$15	\$735	\$22	\$1,015	\$100	\$5,730
Emergency Department (ED)										
Had an ED visit (N,%)	4,152	2.6%	994	1.8%	1,783	2.5%	581	3.9%	794	5.2%
Number of ED visits (Mean, SD)	0.01	0.1	0.01	0.1	0.01	0.1	0.02	0.1	0.03	0.1
ED visit costs (Mean, SD)	\$24	\$370	\$14	\$327	\$24	\$338	\$38	\$565	\$51	\$412
Office Visits										
Had an office visit (N,%)	113,469	71.7%	38,531	68.5%	52,390	72.8%	11,107	74.1%	11,441	75.6%
Number of office visits (Mean, SD)	0.6	0.8	0.5	0.7	0.6	0.8	0.6	1.0	0.7	1.0
Office visit costs (Mean, SD)	\$179	\$1,385	\$138	\$1,853	\$189	\$942	\$223	\$1,142	\$245	\$1,335
Office visit costs (Median, IQR)	\$33	\$117	\$26	\$90	\$35	\$124	\$40	\$148	\$46	\$169
Other Medical Services										
Had an other medical service (N, %)	70,185	44.3%	24,131	42.9%	31,686	44.0%	7,061	47.1%	7,307	48.3%
Number of other medical services (Mean, SD)	0.3	1.1	0.3	0.7	0.3	0.8	0.3	2.8	0.3	0.6
Other medical service costs (Mean, SD)	\$215	\$1,735	\$200	\$1,372	\$208	\$1,696	\$241	\$1,908	\$278	\$2,685
Pharmacy										
Had a pharmacy claim (N,%)	92,689	58.5%	0	0.0%	63,380	88.1%	14,355	95.8%	14,954	98.8%
Number of pharmacy claims (Mean, SD)	2.2	3.2	0.0	0.0	2.9	3.3	3.4	3.2	5.5	3.9
Pharmacy costs (Mean, SD)	\$76	\$466	\$0	\$0	\$90	\$498	\$122	\$462	\$250	\$905
Pharmacy costs (Median, IQR)	\$0	\$19			\$3	\$41	\$11	\$66	\$31	\$146
Total										
Total healthcare costs (Mean, SD)	\$523	\$3,659	\$380	\$4,233	\$526	\$2,182	\$646	\$2,641	\$924	\$6,609
Total healthcare costs (Median, IQR)	\$147	\$384	\$90	\$244	\$166	\$408	\$221	\$506	\$300	\$698

EE, Erosive esophagitis; IQR, interquartile range; LOT, line of therapy; PPI, proton pump inhibitor; SD, standard deviation

Table S4. Sensitivity Analysis of Patients with Esophagogastroduodenoscopy (EGD) in the Baseline Period

	EGD cohort	
	N = 72,658	
Age, Index Date (Mean, SD)	56.2	13.8
Sex (N,%)		
Male	28,427	39.1%
Female	44,199	60.8%
Unknown/Not Reported	32	0.0%
Lines of Therapy^a (N,%)		
0	23,322	32.1%
1	33,481	46.1%
2	7,739	10.7%
3+	8,116	11.2%
36M Follow-up costs, annualized	72,658	1
Inpatient	72,658	1
Had an admission (N,%)	19,785	27.2%
Number of admissions (Mean, SD)	0.19	0.6
Length of stay per admission (Mean, SD)	4.9	6.3
Total hospitalized days (Mean, SD)	1.0	3.9
Inpatient costs (Mean, SD)	\$4,021	\$48,535
Emergency Department (ED)		
Had an ED visit (N,%)	37,873	52.1%
Number of ED visits (Mean, SD)	0.73	2.2
ED visit costs (Mean, SD)	\$1,072	\$3,814
ED visit costs (Median, IQR)	\$46	\$744
Office Visits		
Had an office visit (N,%)	72,110	99.2%
Number of office visits (Mean, SD)	15.3	14.7
Office visit costs (Mean, SD)	\$4,344	\$11,711
Office visit costs (Median, IQR)	\$1,701	\$3,464

Other Medical Services		
Had an other medical service (N, %)	72,167	99.3%
Number of other medical services (Mean, SD)	11.4	22.6
Other medical service costs (Mean, SD)	\$5,995	\$26,666
Other medical service costs (Median, IQR)	\$1,597	\$3,349
Pharmacy		
Had a pharmacy claim (N,%)	65,944	90.8%
Number of pharmacy claims (Mean, SD)	31.0	40.3
Pharmacy costs (Mean, SD)	\$2,134	\$34,588
Pharmacy costs (Median, IQR)	\$206	\$1,066
Total		
Total healthcare costs (Mean, SD)	\$17,565	\$69,889
Total healthcare costs (Median, IQR)	\$6,359	\$13,009

IQR, interquartile range; SD, standard deviation

Figure S1. Sankey Diagram of the First Four Lines of Therapy

