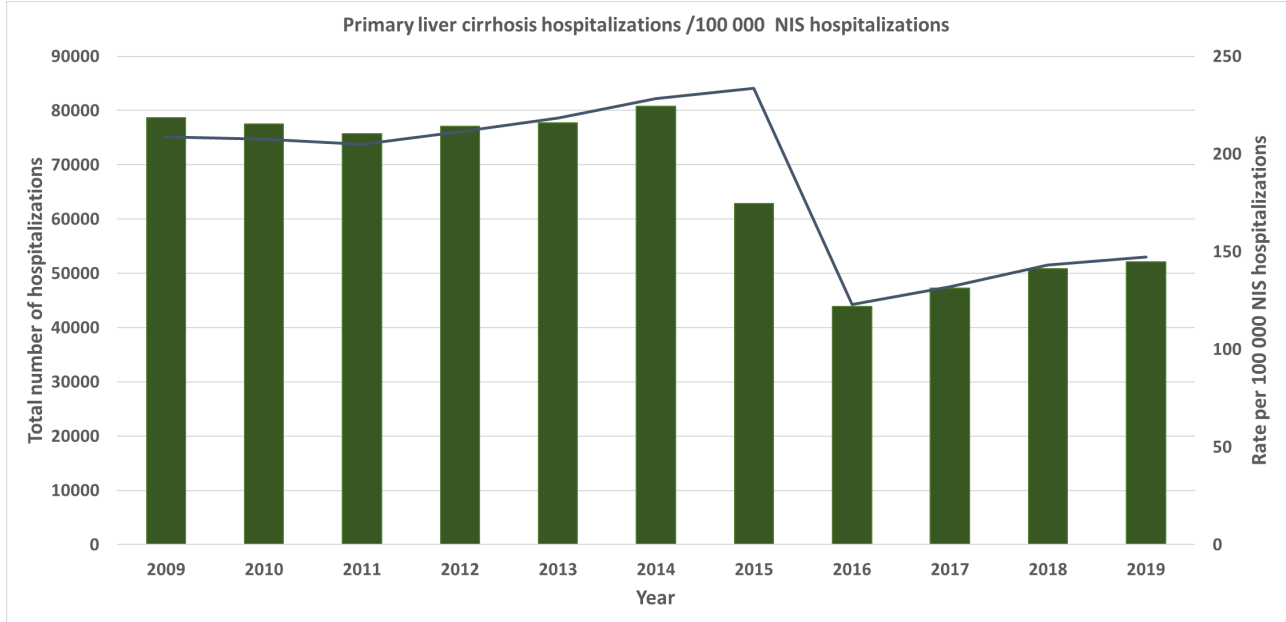
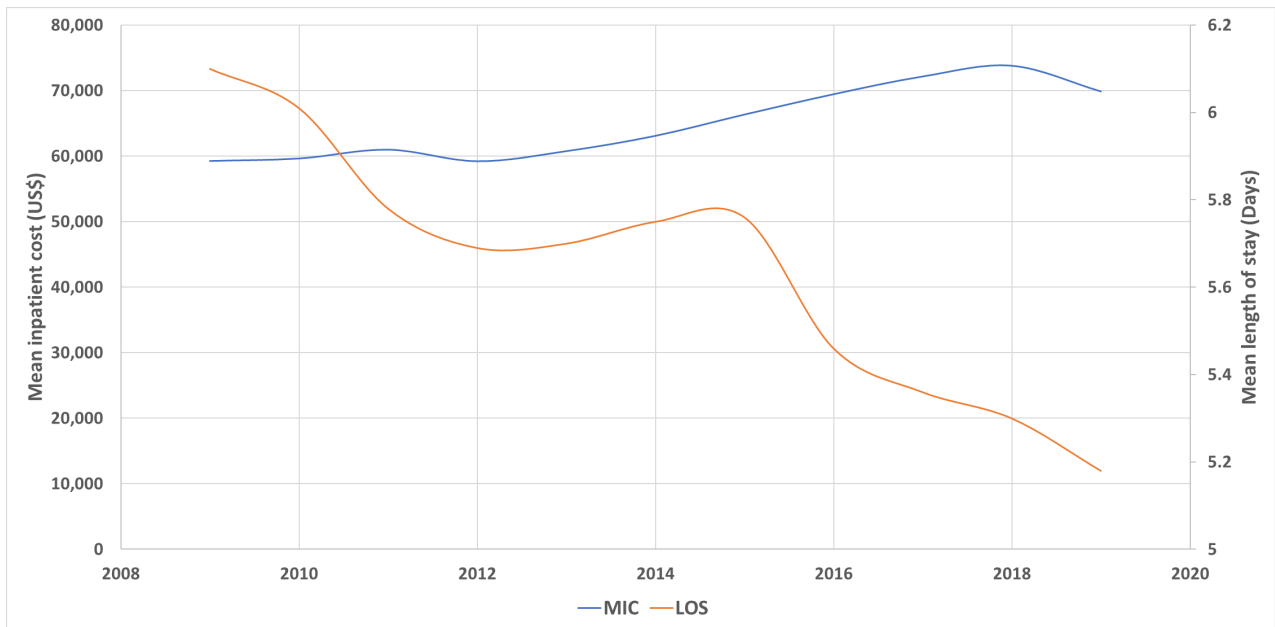


Figure Captions



Supplementary Figure 1: Rate of primary liver cirrhosis hospitalizations per 100,000 NIS claims from 2009 to 2019. Bars show the total liver cirrhosis hospitalizations per year. The line shows the rate of primary liver cirrhosis hospitalizations per 100,000 NIS claims for the study period.



Supplementary Figure 2: Adjusted length of stay and inpatient cost (inflation-adjusted to 2019 US\$) for primary liver cirrhosis hospitalizations from 2009 to 2019.

Supplementary Table 1. ICD-9/10-CM Codes.

Diagnosis	ICD-9-CM Codes	ICD-10-CM Codes
Cirrhosis	571.2, 571.5	K7030, K7031, K7460, K7469, K717
Generalized anxiety disorder	30002	F411
Depression	29621, 29622, 29623, 29624, 2980, 29625, 29626, 29682, 29620, 311	F320, F321, F322, F323, F324, F325, F3289, F329
Somatization	30081	29640, 29641, 29642, 29643, 29644, 29650, 29651, 29652, 29653, 29654, 29660, 29661, 29662, 29663, 29664, 2967, 29645, 29646, 29655, 29656, 29665, 29666, 29689, 29640, 29680
Bipolar disorder	456.00, 456.20	F310, F3110, F3111, F3112, F3113, F312, F3130, F3131, F3132, F314, F315, F3160, F3161, F3162, F3163, F3164, F3170, F3171, F3172, F3173, F3174, F3175, F3176, F3177, F3178, F3181, F3189, F319

Attention-deficit/hyperactivity disorder	31400, 31401, 3142	F900, F901, F902, F908, F909
Schizophrenia	29530, 29520, 29560, 29590	29510, 29590, 29540, 29590
Schizoaffective disorder	29570	F200, F201, F202, F203, F205, F2081, F2089, F209
Post-traumatic stress disorder	30981	F250, F251, F258, F259
Suicidal ideation	V6284	F4310, F4311, F4312 R45851

Supplementary Table 2: Trends of liver cirrhosis hospitalizations in the national inpatient database from 2009 to 2019.

Variables	Years	P-Value
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	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
Total Hospitalizations	78728	7754	75760	77125	77714	80760	62834	43869	47294	50875	52139	<i>P</i> < 0.001
Mean Age (years)	56.06 ± 0.87	55.8 ± 0.44	56.3 ± 0.35	56.2 ± 0.99	56.6 ± 0.66	56.7 ± 0.66	56.8 ± 0.42	59.6 ± 0.39	59.6 ± 0.4	60.0 ± 0.55	60.3 ± 0.35	<i>P</i> < 0.001
Sex												<i>P</i> < 0.001
Male	50274 (64%)	49732 (64%)	48121 (64%)	49545 (64%)	49329 (63%)	51260 (63%)	39859 (63%)	25234 (58%)	27024 (57%)	29120 (57%)	29474 (57%)	
Female	28434 (36%)	27768 (36%)	27624 (36%)	27575 (36%)	28384 (37%)	29480 (37%)	22960 (37%)	18624 (42%)	20265 (43%)	21755 (43%)	22664 (43%)	
Adjusted Mean length of stay	6.1 ± 0.22	6.01 ± 0.141	5.78 ± 0.14	5.69 ± 0.08	5.7 ± 0.09	5.75 ± 0.09	5.76 ± 0.10	5.46 ± 0.11	5.3 ± 0.1	5.3 ± 0.10	5.18 ± 0.08	<i>P</i> < 0.001

Adjusted Mean inpatient cost (\$)	5926 ± 4111	596 ± 3519	6099 ± 4254	592 ± 1898	607 ± 1953	631 ± 1897	663 ± 2133	694 ± 2695	721 ± 2671	738 ± 3826	698 ± 2360	P = 0.001
Age Groups (years)												P < 0.001
18 - 34	3397 (4%)	3261 (4%)	3398 (4%)	3385 (4%)	3375 (4%)	3465 (4%)	2570 (4%)	1210 (3%)	1660 (4%)	1560 (3%)	1645 (3%)	
34 - 49	1937 (25%)	1917 (25%)	1681 (22%)	1667 (22%)	1615 (20%)	1584 (20%)	1320 (21%)	7055 (16%)	7704 (16%)	8235 (16%)	8450 (16%)	
50 - 64	3774 (48%)	3783 (49%)	3850 (51%)	3976 (52%)	40029 (52%)	42190 (52%)	31779 (51%)	21034 (48%)	21634 (46%)	22715 (45%)	22274 (43%)	
65 - 79	14603 (19%)	13755 (18%)	13470 (18%)	13860 (18%)	14570 (19%)	15815 (20%)	12530 (20%)	11620 (26%)	13230 (28%)	15025 (30%)	15919 (31%)	

ty Index (CCI)												
I=0	2434 (3%)	215 9 (3%))	2055 (3%)	201 0 (3%))	166 5 (2%))	155 0 (2%))	102 0 (2%))	0 (0%))	0 (0%))	0 (0%))	0 (0%))	
I=1	1211 6 (15%)	122 52 (16%)	1075 0 (14%)	108 40 (14%)	105 10 (14%)	100 40 (12%)	786 9 (13%)	535 9 (12%)	535 5 (11%)	558 5 (11%)	551 9 (11%)	
I=2	6403 (8%)	591 9 (8%))	5733 (8%)	562 5 (7%))	553 0 (7%))	573 5 (7%))	424 5 (7%))	383 4 (9%))	426 4 (9%))	433 5 (9%))	413 5 (8%))	
I ≥ 3	5777 4 (73%)	571 82 (74%)	5722 2 (76%)	586 50 (76%)	600 09 (77%)	634 35 (79%)	497 00 (79%)	346 74 (79%)	376 75 (0%)	409 55 (81%)	424 84 (81%)	
Hospital Location and Teaching Status												<i>P</i> < 0.001

Rural	6117 (8 %)	641 2 (8%)	6386 (9%)	663 0 (9%)	637 4 (8%)	514 4 (6%)	383 4 (6%)	269 9 (6%)	290 9 (6)	284 9 (6%)	296 9 (6%)	
Urban Nonteachi ng	3134 0 (41) (41) (%)	301 72 (39) (39) (%)	3057 0 (41%)	283 99 (37) (37) (%)	283 45 (36) (36) (%)	216 24 (27) (27) (%)	164 90 (26) (26) (%)	112 64 (26) (26) (%)	104 40 (22) (22) (%)	103 00 (20) (20) (%)	901 9 (17) (17) (%)	
Urban Teaching	3982 5 (52) (52) (%)	401 64 (52) (52) (%)	3721 7 (50%)	420 95 (55) (55) (%)	429 94 (55) (55) (%)	539 90 (67) (67) (%)	425 10 (68) (68) (%)	299 05 (68) (68) (%)	339 44 (72) (72) (%)	377 24 (74) (74) (%)	401 50 (77) (77) (%)	
Primary Payer												<i>P</i> < 0.001
Medicare	2581 9 (35) (35) (%)	245 50 (34) (34) (%)	2484 3 (35%)	262 00 (36) (36) (%)	271 94 (37) (37) (%)	283 95 (37) (37) (%)	219 00 (37) (37) (%)	192 54 (46) (46) (%)	206 20 (45) (45) (%)	229 05 (47) (47) (%)	238 79 (48) (48) (%)	
Medicaid	1884 4 (25) (25) (%)	196 52 (27) (27) (%)	1882 4 (27%)	188 55 (26) (26) (%)	190 10 (26) (26) (%)	231 50 (30) (30) (%)	185 20 (31) (31) (%)	109 39 (26) (26) (%)	115 49 (25) (25) (%)	117 25 (24) (24) (%)	122 84 (24) (24) (%)	
Private	1955 7 (26)	176 24 (25)	1761 7 (25%)	172 15 (24)	168 49 (23)	180 00 (23)	146 04 (24)	927 9 (22)	989 5 (22)	107 15 (22)	105 85 (21)	

))))))))))))	
Other	9841 (13))	998 4 (14))	9073 (13)	965 5 (13)	961 4 (13)	753 5 (10)	496 0 (8)	270 9 (6)	327 0 (7)	339 0 (7)	344 5 (7)		
Median Household Income													P = 0.007 8
1 st (0-25 th)	2444 0 (32))	252 94 (34))	2426 0 (33))	266 55 (36)	253 39 (34)	272 80 (35)	218 95 (36)	159 44 (37)	168 65 (37)	174 90 (35)	185 60 (36)		
2 nd (26 th -50 th)	2056 8 (27))	195 40 (26))	1945 4 (26))	189 00 (25)	200 24 (27)	221 05 (28)	155 44 (25)	110 80 (26)	123 55 (27)	139 60 (28)	133 94 (26)		
3 rd (51 st -75 th)	1729 2 (23))	173 24 (23))	1792 9 (24))	164 35 (22)	176 09 (23)	162 29 (21)	136 65 (22)	931 5 (22)	993 4 (22)	110 65 (22)	116 35 (23)		
4 th (76 th -100 th)	1329 3 (18))	123 54 (17))	1219 7 (17))	127 65 (17)	124 10 (16)	126 70 (16)	999 5 (16)	644 0 (15)	699 5 (15)	704 0 (14)	741 0 (15)		

Died	5211 (7%)	411 1 (5%))	4195 (6%)	394 0 (5%))	394 5 (5%))	443 0 (5%))	319 5 (5%))	184 0 (4%))	188 5 (4%))	192 0 (4%))	185 5 (4%))	<i>P</i> < 0.001
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Supplementary Table 3: Association of common psychiatric conditions with liver cirrhosis hospitalizations.

Variables	Adjusted Odds Ratio with 95% Confidence Interval	P- Value
GAD	0.54 [0.50-0.59]	<i>P</i> < 0.001
Depression	1.11 [1.08-1.13]	<i>P</i> < 0.001

Bipolar disorder	1.05 [1.01-1.09]	$P = 0.010$
ADHD	0.45 [0.39-0.51]	$P < 0.001$
Schizophrenia	0.92 [0.86-0.98]	$P = 0.020$
Schizoaffective disorder	0.71 [0.64-0.79]	$P < 0.001$
PTSD	0.63 [0.59-0.68]	$P < 0.001$
Chronic Fatigue	0.94 [0.70-1.26]	$P = 0.72$
Suicidal ideation	0.21 [0.19-0.23]	$P < 0.001$