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## Nearly One-Fifth of Cirrhosis Patients Prescribed Opioids During Clinic Visits

**ALEXANDRIA, Va.** – A new study has found that among patients with cirrhosis, a late-stage liver disease, almost one in five outpatient clinic visits involve an opioid prescription. The study, presented this week at [The Liver Meeting Digital Experience™](#) held by [the American Association for the Study of Liver Diseases](#), also suggests that most of the physicians who prescribe opioids for patients with cirrhosis are not gastroenterologists or hepatologists, raising concerns those physicians may be less familiar with the potentially harmful effects of opioid drugs in patients with liver disease.

“Pain management for patients with cirrhosis can be difficult, and providers may feel they have few options other than opioids,” said Anna H. Lee, MD, an internist at the Ronald Reagan UCLA Medical Center and the study’s lead author. “Since opioid prescriptions are still largely fueling the opioid epidemic in our country, we wanted to observe these prescription patterns in patients with cirrhosis.”

Cirrhosis is a liver disease that involves the replacement of healthy tissue with scar tissue, eventually leading to irreversible organ damage and loss of function. People with cirrhosis who use opioids can develop side effects and require more care from their doctors.

“Proper functioning of many medications relies on metabolism in the liver. It is crucial that all prescribers be aware of the added harms associated with opioid use in patients with cirrhosis, such as the risk of hepatic encephalopathy and greater health care use,” Lee said.

Lee and other researchers at the University of California, Los Angeles, used data from the National Ambulatory Medical Care Survey (NAMCS) from 2006 to 2016 to identify, with medical codes, ambulatory care visits that involved patients diagnosed with cirrhosis to analyze. For ambulatory care visits in which there was an opioid prescription, researchers assessed the type of opioid prescribed, any associated pain diagnosis and whether it was an old or new prescription. They also compared the characteristics of patients and providers in the visits with and without an opioid prescription.

The study found that, of the 10.1 million ambulatory care visits with a diagnosis of cirrhosis:

- 53 percent of the visits were with gastroenterologists, including hepatologists.
- 41 percent were with primary care physicians (PCPs).
- An opioid was prescribed in 17 percent (1.7 million) of the visits. Of these prescriptions, 91 percent involved an opioid prescription renewal rather than a new prescription.
- Oxycodone and hydrocodone were the most frequently prescribed opioids.

- 68 percent of visits that included an opioid prescription were with PCPs.
- 29 percent of visits that included an opioid prescription were with gastroenterologists.
- There was a documented pain diagnosis in only 41 percent of visits in which an opioid was prescribed. The most common pain condition among these patients was musculoskeletal pain, followed by gastrointestinal pain.

“Since most opioid prescriptions are associated with primary care visits, we should target our educational efforts about harms toward primary care providers,” Lee said. “All clinicians can benefit from more education about safe options for managing pain disorders.”

*Dr. Lee’s poster entitled “Opioid Prescription Patterns Among Ambulatory Patients with Cirrhosis: A Nationwide Analysis” (655) can be viewed at The Liver Meeting Digital Experience™. The corresponding abstract can be found in the journal [HEPATOLOGY](#).*

### **About AASLD**

AASLD is the leading organization of clinicians and researchers committed to preventing and curing liver disease. The work of our members has laid the foundation for the development of drugs used to treat patients with viral hepatitis. Access to care and support of liver disease research are at the center of AASLD’s advocacy efforts.

News releases and additional information about AASLD are available online at [www.aasld.org](http://www.aasld.org).

## **Abstract 655: OPIOID PRESCRIPTION PATTERNS AMONG AMBULATORY PATIENTS WITH CIRRHOSIS: A NATIONWIDE ANALYSIS**

### **Abstract Information**

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### **Abstract Text**

**Background:** Opioid use among patients with cirrhosis is common and associated with an increased risk of adverse events and subsequent healthcare utilization. Opioids prescribed in the ambulatory setting likely contribute to these trends. The aim of our study was to assess national opioid prescription patterns in patients with cirrhosis, along with associated pain diagnoses, in the ambulatory setting.

**Methods:** We conducted a repeated, cross-sectional study using the National Ambulatory Medical Care Survey (NAMCS) data from 2006 to 2016. We identified ambulatory visits involving patients with a diagnosis of cirrhosis using validated International Classification of Diseases (ICD)-9 and 10 codes. Of visits involving an opioid prescription, we assessed opioid type, associated pain diagnoses using ICD-9 codes (2006-2015), and whether the prescription was new or old. Patient and provider characteristics were compared between visits involving and not involving an opioid prescription. Data were weighted to calculate national estimates.

**Results:** Our study population represented 10.1 million ambulatory visits with a diagnosis of cirrhosis from 2006 to 2016. The majority of visits were with gastroenterologists (GIs) (53%) which included hepatologists, followed by primary care providers (PCPs) (41%) (Table 1). Seventeen percent of visits (1.7 million) were associated with an opioid prescription. Of these, 1.6 million (91%) featured opioid prescription renewals. Oxycodone (35%) and hydrocodone (25%) were most frequently prescribed. Sixty-eight percent of the opioid visits were with PCPs and 29% were with GI's. Only 41% of visits with an opioid prescription were associated with a documented pain diagnosis. Of these visits, musculoskeletal (34%) and gastrointestinal (28%) pain were the most common diagnoses.

**Conclusion:** Almost one in five patients with cirrhosis received opioid prescriptions during outpatient visits. While these patients are seen by both GIs and PCPs, PCP visits were associated with higher rates of opioid prescriptions (>2-fold) compared to those with GIs. Less than half of visits associated with an opioid prescription documented a pain diagnosis. Our results suggest that opioids are being prescribed by physicians, the majority of whom are not GIs nor hepatologists, who may be less familiar with the

harmful effects of opioids in these patients. Educational efforts on the use of opioids with regard to indication, safety, and alternative therapeutic agents in patients with cirrhosis are needed.

Visit Characteristics	Cirrhosis diagnosis			Prescribed opioids	
	Visits	Weighted Visits (n 1,000s)	% of Visits	Weighted Visits (n 1,000s)	% of Visits
<b>All visits</b>	386	<b>10,116</b>	<b>100%</b>		
<b>Prescribed opioids</b>	79	<b>1,736</b>	<b>17%</b>	<b>1,736</b>	<b>100%</b>
<b>New opioid prescription</b>	8	<b>163</b>	<b>2%</b>	<b>163</b>	<b>9%</b>
<b>Continued opioid prescription</b>	71	<b>1,573</b>	<b>16%</b>	<b>1,573</b>	<b>91%</b>
<b>Male</b>	212	5,383	53%	1,211	70%
<b>Age</b>					
Under 40	27	657	6%	29	2%
40 - 64	233	6,179	61%	1,115	64%
65 and over	126	3,280	32%	592	34%
<b>Race/ethnicity</b>					
White	264	6,746	67%	1,201	69%
Black	32	834	8%	303	17%
Hispanic	59	1,657	16%	149	9%
Other	31	880	9%	83	5%
<b>Region</b>					
Northeast	59	2,209	22%	488	28%
Midwest	90	1,481	15%	313	18%
South	121	4,070	40%	621	36%
West	116	2,356	23%	314	18%
Rural	40	733	7%	281	16%
<b>Payment source</b>					
Private insurance	119	3,265	32%	495	29%
Medicare	156	4,525	45%	820	47%
Medicaid	52	1,199	12%	235	14%
Other	59	1,127	11%	185	11%
Decompensated Cirrhosis	127	2,939	29%	551	32%
<b>Comorbidities</b>					
Arthritis	44	1,138	11%	106	6%
Depression	36	767	8%	119	7%
Obesity	52	1,240	12%	269	16%
<b>Provider specialty</b>					
Gastroenterology [2]	192	5,375	53%	495	29%
Primary care	150	4,179	41%	1,185	68%
Surgery	20	250	2%	9	0%
Other [3]	24	312	3%	47	3%

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