

U.S. HOSPITALIZATION CHARACTERISTICS OF CIRRHOTIC PATIENTS WITH ASCITES RECEIVING PARACENTESIS

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Background

Cirrhosis patients with ascites have high rates of hospital admissions.¹

Identifying drivers of hospital readmissions is important to reduce readmissions and improve patient outcomes.

Methods

Using the Nationwide Readmissions Database (NRD), we analyzed 2016 hospital admissions for patients with a diagnosis of cirrhosis (C) and ascites (A) who underwent paracentesis (P).

Analysis was performed on discharges in 2016 with the relevant ICD-10-CM/PCS codes to estimate total US discharges and their characteristics (Table 1).

We then analyzed the readmission patterns of 10,385 of these patients admitted in the first 6 months of 2016 and followed for 6 months after their index admission (“Readmission Cohort”).

Results

Table 1: 2016 Total US Discharges

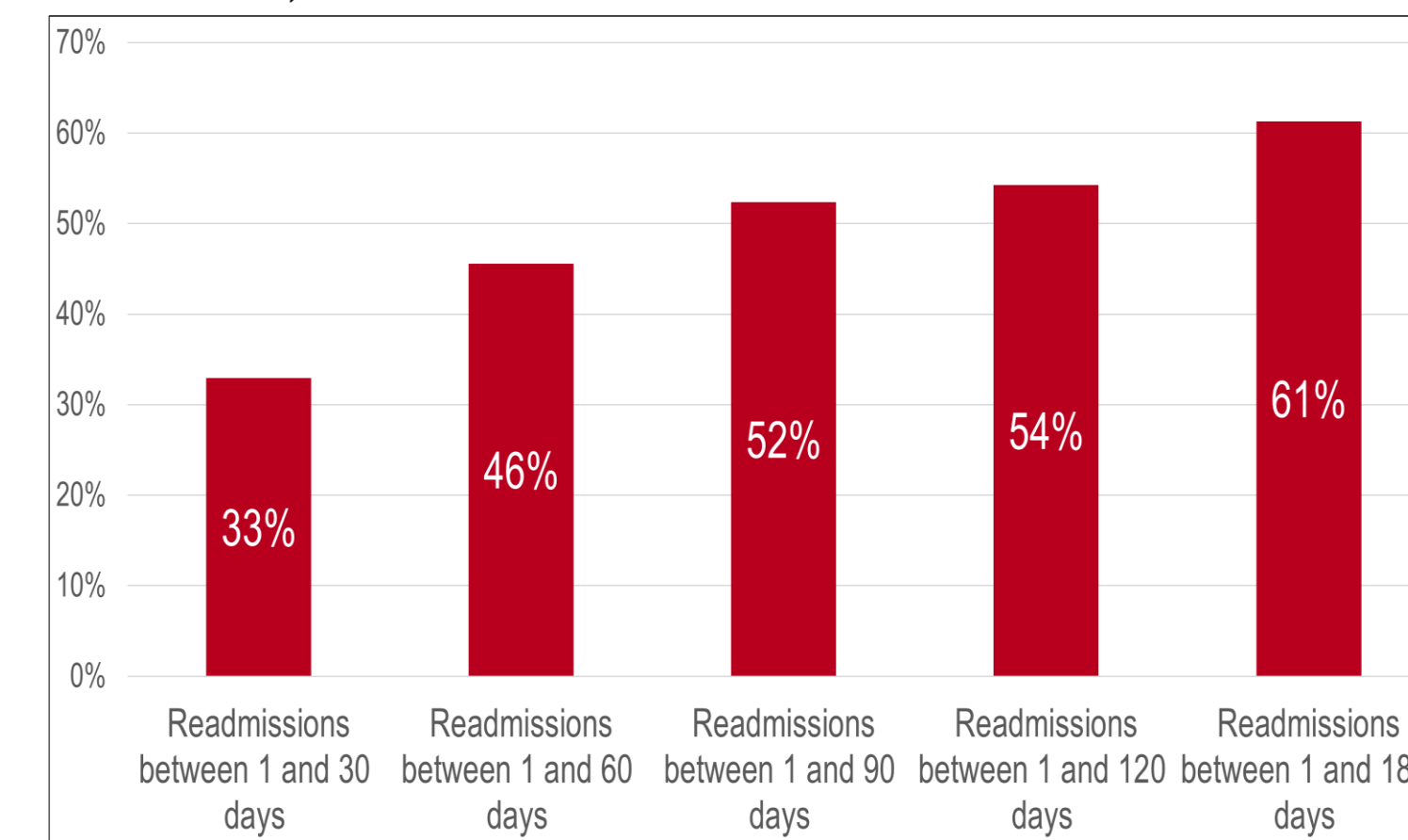
Characteristics of Cirrhosis, Ascites & Paracentesis Discharges	
Cirrhosis, Ascites & Paracentesis Discharges	57,485
% Male	55%
Average Age (years)	63.1
Average Length of Stay (days)	8.2
Average total charges	\$86,130

HCUP Nationwide Readmissions Database (NRD) 2016. Projected national figures.

Among the Readmission Cohort of 10,385 patients 33% were readmitted within 30 days for a liver-related diagnosis and 61% within 6 months.

Readmitted patients had an average of 2.24 subsequent admissions.

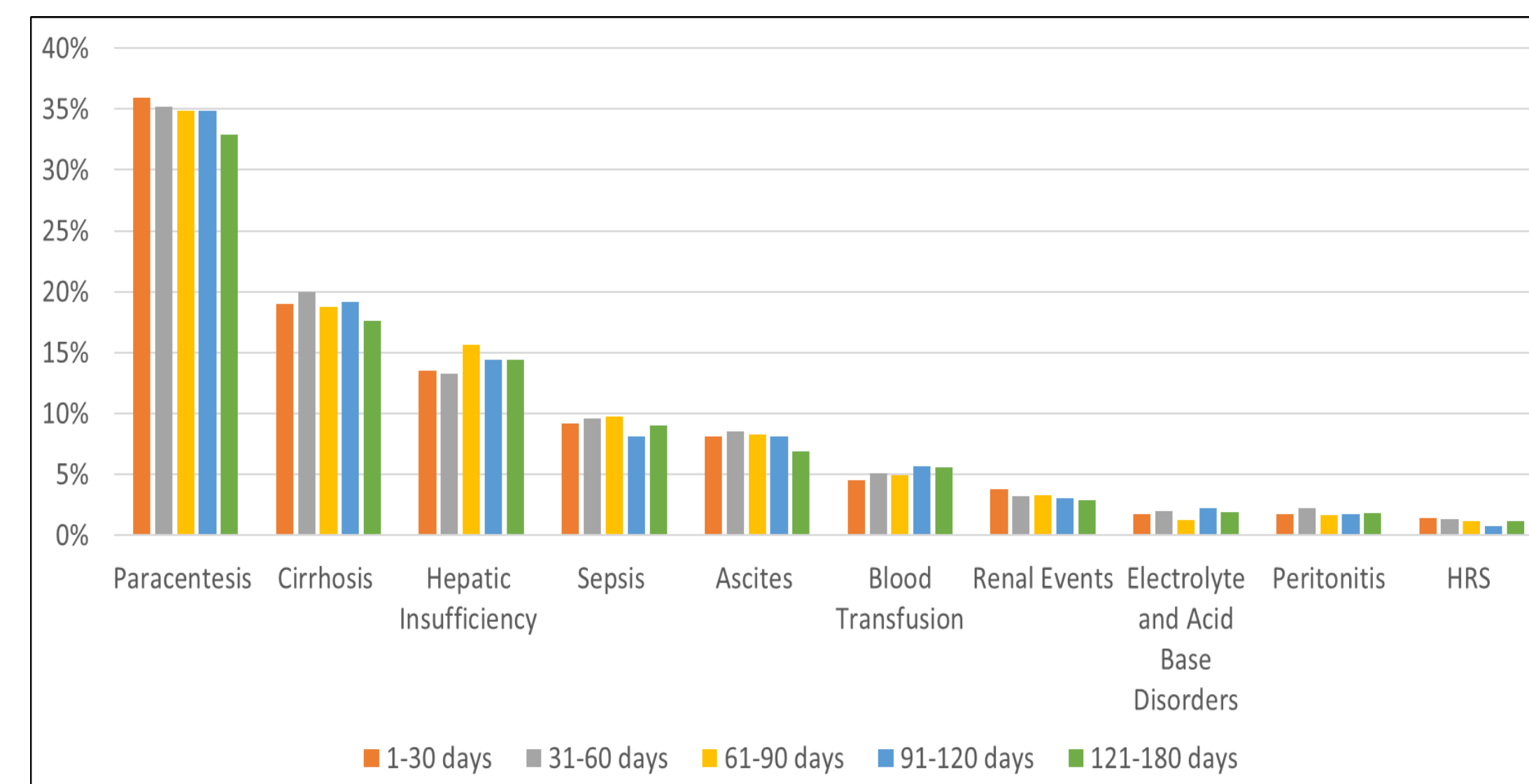
Figure 1: Readmission Rate for Patients Admitted with Diagnosis of Cirrhosis, Ascites & Paracentesis



HCUP Nationwide Readmissions Database (NRD) 2016. Post-Index rehospitalization rate.

Primary readmission diagnoses and procedures remained remarkably constant over time (Figure 2).

Figure 2: Primary Readmission Diagnoses & Procedures (Up to 180 Days)

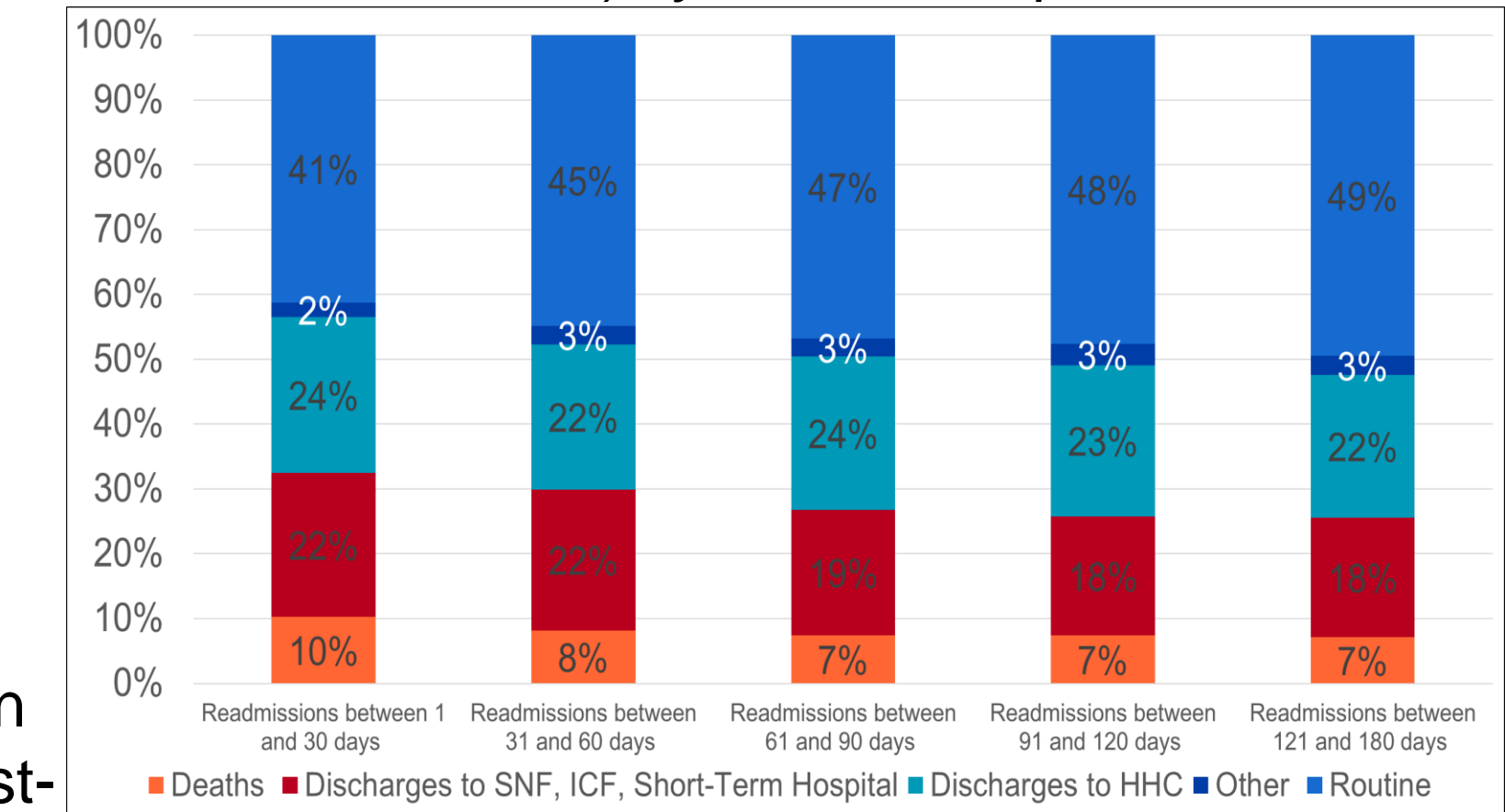


HCUP Nationwide Readmissions Database (NRD) 2016. Post-Index rehospitalization discharge characteristics for 14,271 total readmissions.

Up to 46% of readmissions required an alternative level of care upon discharge.

Overall, 19% of patients readmitted died on subsequent hospitalization in the 6-month post-index period.

Figure 3: Rate of Mortality & Discharge Type (Including to Other Levels of Care) by Time of Hospital Readmission



HCUP Nationwide Readmissions Database (NRD) 2016. Post-Index rehospitalization discharge characteristics for 14,271 total readmissions.

CONCLUSIONS

Patients with a diagnosis of cirrhosis and ascites requiring paracentesis have a significant 30-day readmission rate as well as high rates of mortality and discharge to additional levels of care over 6 months.

Reasons for readmission remain constant and predictable, and thus preventable.

Inpatient costs demonstrate a substantial burden for these patients with projected hospitalization charges totaling \$4.95 billion.

There is a significant unmet medical need for additional treatment options to reduce hospitalization for these patients.

Acknowledgements & Disclosures

1. Rika O. Mortimer, PhD. is a consultant to BioVie, Inc.
2. Scott Mortimer, MBA is a consultant to BioVie, Inc.
3. Penelope Markham, PhD. is an employee of BioVie, Inc.
4. Patrick Yeramian, MD is an employee of BioVie, Inc.
5. Jonathan Adams, MBA is an employee of BioVie, Inc.
6. Michael Volk, MD, MSc, has received consulting fees from BioVie, Inc.

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1. Volk ML, Tocco RS, Bazick J, Rakoski MO, Lok AS. Hospital Readmissions Among Patients With Decompensated Cirrhosis. Am J Gastroenterol. 2012 Feb;107(2):247-52.