# Epidemiology and Hospital Utilization in Mantle Cell Lymphoma: A Retrospective Analysis of 2022 NIS

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## Introduction

Mantle Cell Lymphoma(MCL) is a rare and aggressive subtype **B-cell non-Hodgkin lymphoma.**




**t(11;14)**

**~5%**

Of total NHL cases and associated with **poor prognosis** due to its heterogeneous clinical course

By examining demographic trends, outcomes, and healthcare resource use, we sought to highlight the inpatient burden of MCL at a national scale.

## Aim

Evaluate the epidemiology, clinical outcomes, and healthcare utilization of patients hospitalized with mantle cell lymphoma (MCL) in the United States using the 2022 National Inpatient Sample.

## Methods

- Data Source: National Inpatient Sample (NIS) 2022
- Cohort: Hospitalizations with mantle cell lymphoma (MCL)
- Outcomes Measured:
  1. Epidemiology (age, sex, race, region)
  2. Clinical outcomes (in-hospital mortality)
  3. Health care utilization (length of stay, hospital type/size, insurance status, total charge)
- Statistical Analysis: Descriptive and comparative statistics (t-tests, chi-square tests); significance set at $P < 0.05$

| Variable | Value | P value |
|---|---|---|
| **Age** | | |
| Mean age (years) | 69 | 0.01 |
| **Gender** | | |
| Male (%) | 75 | |
| Female (%) | 25 | |
| **Race** | | |
| White (%) | 82 | |
| Hispanic (%) | 8.5 | |
| Black (%) | 4.5 | |
| **Geography** | | |
| South (%) | 35 | < 0.01 |
| Midwest (%) | 25 | |
| Northeast (%) | 20 | |
| West (%) | 20 | |

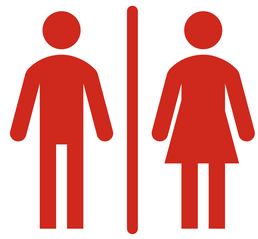
## Results

- Total hospitalizations: 2,397
- Sex: MCL is more common in males (75%) than in females (25%)
- Race: White 82%, Hispanic 8.5%, Black 4.5%
- Mean age: 69 years (SE 0.22, P = 0.01)
- LOS: 7 days (P = 0.00)
- Mean total charges: $143,112
- In-hospital mortality: 7.5%
- Hospital type: 84% teaching vs. 16% non-teaching
- Hospital size: Large 62%, Medium 21%, Small 18% (no mortality difference)
- Insurance status: Medicare 60%, Private 28%, Medicaid 6% (P = 0.02)
- Geographic distribution: South 35%, Midwest 25%, Northeast 20%, West 20% (P = 0.00; no mortality difference)

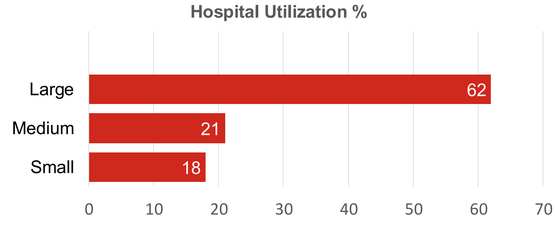
**180** In-hospital mortality rate

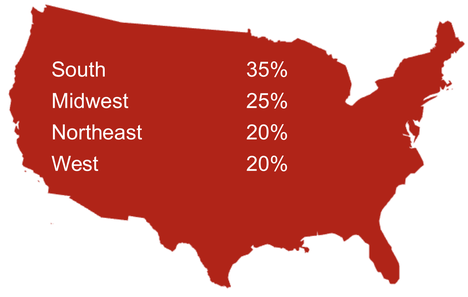
**7** Days Length of Stay

**$143,112** Mean total charges in hospitalization



**75%** **25%**




## Discussion

- This study highlights the considerable **clinical burden and high healthcare utilization** among patients with MCL. It also emphasizes the need for further research to better understand disparities in outcomes and healthcare costs.