COMPARISON OF TRENDS IN HOSPICE UTILIZATION AMONG PATIENTS WITH MYELOID AND LYMPHOID MALIGNANCIES BASED ON GEOGRAPHIC LOCATION AND AGE (2003–2020): A CDC WONDER DATABASE ANALYSIS

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Introduction

Myeloid and lymphoid malignancies contribute significantly to end-of-life cancer care needs. Hospice care has expanded, yet disparities persist. This study investigates geographic and age-related trends in hospice utilization across the U.S.

Aim

To compare hospice use in myeloid vs. lymphoid malignancies by age and geographic location from 2003 to 2020.

Objectives

- Assess national hospice utilization trends over time
- Compare usage between myeloid and lymphoid malignancies
- Explore disparities by age group and region (metro vs. non-metro)

Methods

CDC WONDER mortality data from 2003 to 2020 were analyzed for hematologic malignancies (ICD-10: C81–C95). The Mann–Kendall trend test evaluated temporal trends. Data were stratified by age and geographic location. P < .05 was considered statistically significant.

Results

Hospice Usage Trends (2003–2020):

- Myeloid malignancies: Increased in all U.S. regions – Northeast (τ = 0.774), Midwest (τ = 0.868), South (τ = 0.937), West (τ = 0.843); p < .001
- Lymphoid malignancies: Similar increases – Northeast (τ = 0.879), Midwest (τ = 0.912), South (τ = 0.905), West (τ = 0.817); p < .001

Age and Location-Based Trends:

- Myeloid:
  - Young adults (τ = 0.838)
  - Older adults (τ = 0.935)
  - Non-metro (τ = 0.933)
  - Metro (τ = 0.908)
- Lymphoid:
  - Young adults (τ = 0.735)
  - Older adults (τ = 0.948)
  - Non-metro (τ = 0.950)
  - Metro (τ = 0.908)

Total Utilization by Subgroup:

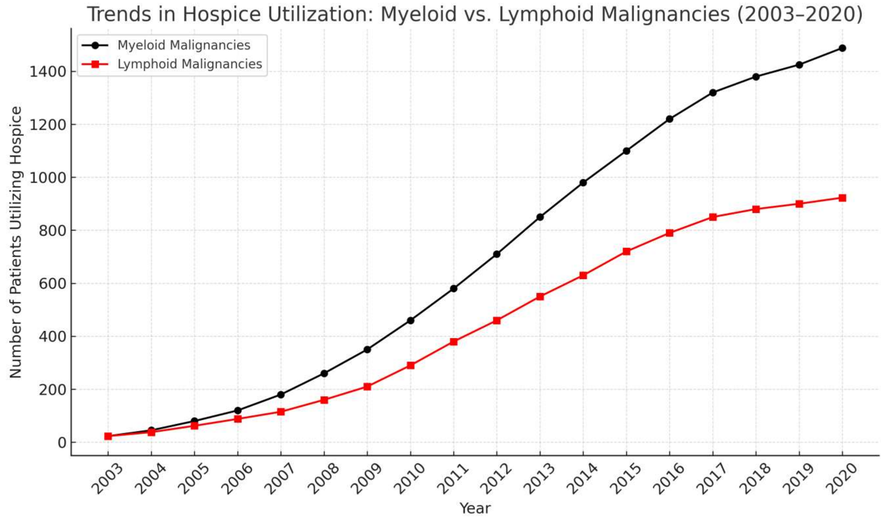
- Young adults: Myeloid (2,965) vs. Lymphoid (1,378); p < .001
- Older adults: Myeloid (14,111) vs. Lymphoid (8,927); p = 0.042
- Metro: Myeloid (15,246) vs. Lymphoid (9,174); p = 0.021
- Non-metro: Myeloid (1,826) vs. Lymphoid (1,151); p = 0.58 (NS)

Summary

Hospice utilization increased significantly in both myeloid and lymphoid malignancies across geographic and age-based subgroups. Myeloid patients consistently had higher absolute usage, especially among younger and metropolitan populations.

Discussion

These findings reflect broader hospice adoption, but disease-specific trends may reflect differences in illness trajectory, access, or referral behaviors. Lower hospice use in lymphoid malignancies and in non-metropolitan regions signals a need for further exploration and targeted care interventions.



The abstract reports original research; no funding was required. All authors declare no conflicts of interest.© 2025. All rights reserved.