

Trends in Use and Outcomes of Autologous and Allogeneic Hematopoietic Cell Transplantation among Racial/Ethnic Groups in the U.S.

WHY?

There has been an increase in the number of autologous (your own cells) and allogeneic (cells from donor) hematopoietic cell transplants (HCT) worldwide and improvement in outcomes after HCT for most hematologic disorders over time. Racial/ethnic disparities in access and outcomes of HCT are well documented, and there have been efforts made to mitigate these disparities. This research looked at whether there have been improvements in the utilization and outcomes after HCT among various U.S. racial/ethnic groups over time.

EQUAL OUTCOMES FOR ALL. ACCESS TO CARE FOR ALL.



This observational study evaluated utilization rates and outcomes after HCT comparing non-Hispanic whites and racial/ethnic groups in the U.S. Provider reported race/ethnic groups were divided into non-Hispanic white, African American, Hispanic and other (Asian, Pacific Islander, Native American).



WHAT?

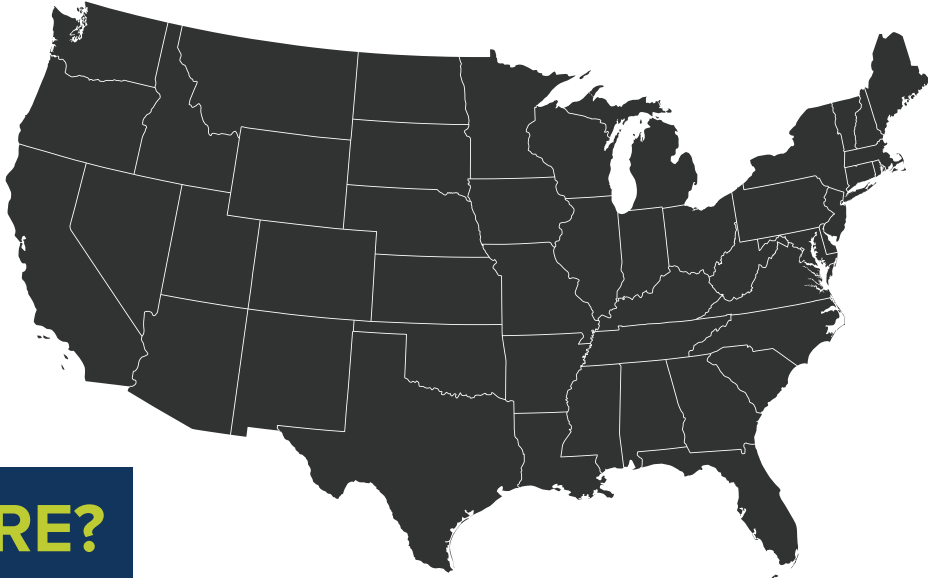
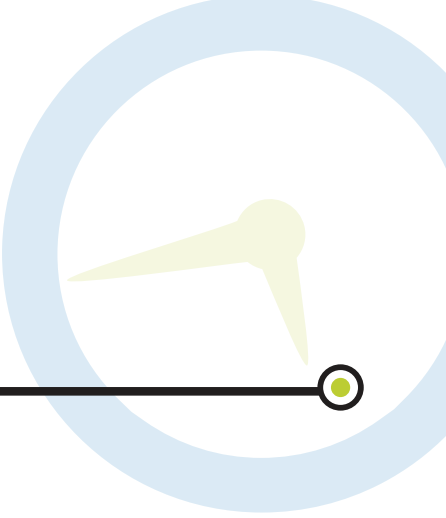
WHO?

80,080 adults who had their first autologous HCT and 60,412 adult and pediatric patients who had their first allogeneic HCT to treat a blood cancer between 2009-2018.

| Disease | Transplant Type | Patient Population (Age) |
|---|-----------------|--------------------------|
| Non-Hodgkin lymphoma (NHL) | Autologous | Adult |
| Hodgkin disease (HD) | Autologous | Adult |
| Multiple myeloma | Autologous | Adult |
| Acute myeloid leukemia (AML) | Allogeneic | Pediatric + Adult |
| Acute lymphoblastic leukemia (ALL) | Allogeneic | Pediatric + Adult |
| Lymphoma, including chronic lymphocytic leukemia (CLL) | Allogeneic | Pediatric + Adult |
| Myelodysplastic syndrome (MDS)/myeloproliferative disease (MPD) | Allogeneic | Pediatric + Adult |

WHEN?

2009-2018



WHERE?

Increased utilization of autologous and allogeneic HCT from 2009-2018 in African American, Hispanic and other races.

Overall survival after autologous HCT and allogeneic HCT in adults has significantly improved for all racial/ethnic groups over time.

In pediatric patients, overall survival after allogeneic HCT is significantly lower for African Americans and those who were in the "other" category (Asian, Pacific Islander, Native American) compared to non-Hispanic Whites, with Hispanics having similar overall survival to non-Hispanic White patients.

Although there have been improvements in HCT utilization and outcomes over time, there is still a gap in outcome for pediatric patients undergoing allogeneic HCT who are African American or were in the "other" category (Asian, Pacific Islander, Native American). There is a need to strengthen efforts to improve access to and outcomes of HCT. It is the responsibility of all stakeholders to take on this challenge.

National Marrow Donor Program® (NMDP)/Be The Match® is committed to achieving equal opportunity and outcomes for all patients.

IMPACT/FINDINGS:

FROM THE EXPERTS

We're committed to making sure all stem cell transplant patients have equal access to transplant and equal outcomes. That's not the case today, and we won't rest until that goal is achieved. We need more research and philanthropic funding to get there.

Our study shows encouraging results in terms of narrowing the gap between outcomes of autologous and allogeneic hematopoietic cell transplantation in adults from different racial/ethnic groups. Unfortunately, disparities in outcomes persist in pediatric patients undergoing allogeneic HCT. We need to continue to build on societal efforts to improve access and quality of care for all patients requiring an HCT, irrespective of their sociodemographic profile."



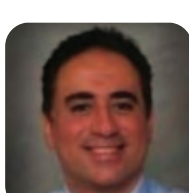
Nandita Khera, MD, MPH
Bone and Marrow Transplant Physician
Mayo Clinic

The good news is that utilization of both autologous and allogeneic HCT has increased across all races and Hispanic ethnicity between 2009 and 2018. Survival has improved for most HCT patients, however there is still room for improvement in some subgroups. Hopefully our study helps focus attention on patients who need additional study to improve their survival after HCT."



Theresa Hahn, PhD, MS
Professor of Oncology
Clinical Epidemiologist
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The CIBMTR leveraged its infrastructure and used modern tools to interface with public databases in order to address a critical question, inform policy, and bring benefit to all patients."



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