Academic Center Outreach to Community Practices Increases Transplant Referrals and Possibly Reduce Racial Disparities

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Abstract

Introduction: Racial disparities are evident in transplant utilization for hematologic malignancies. Outcomes improve for multiple myeloma (MM) with an autologous stem cell transplant (autoSCT) but despite the guidelines, African Americans (AA) receive fewer autoSCT when compared to whites (W). Multiple single-institution studies have confirmed that rates of autoSCT for MM in AA are similar to W when patients are referred for transplant evaluation. This lower referral to a transplant center may contribute also contribute to the disparities. Emphasis on physician to physician communication to facilitate an improved referral network may represent an intervention to overcome this disparity. We reviewed our center data to assess the impact of physician outreach on transplant referrals and impact on race.

Methods: We reviewed all transplants (both autoSCT and alloSCT) performed at Augusta University between fiscal years 2015 to 2021. Patients were divided into two cohorts (cohort A: FY2014-17 and cohort B: FY2019-21) based on initiation of physician outreach by our program. FY2018 was used in our analysis for a year of aggressive outreach which included our physicians visiting all practices within our catchment area. In addition, two outreach clinics were established in collaboration with large community practice sites. Statistics are descriptive.

Results: A total of 389 transplants analyzed included patients age >18 years with 52% males and 45% age ≥ 61 years. Cohort B had a significant increase in transplants with 266 vs 123 in cohort A, a 116% increase. We found an increase in median distance travelled to our center from 15.2 to 52.3 miles. Considering 15 miles as the city urban area, >60% of transplants in cohort B were from outside our urban area. The increase in median distance travelled was found in both autoSCT and alloSCT (15.2 vs 40.3 and 15.2 vs 79.3, respectively).
More significantly, cohort B had a 147% increase in AA compared to 96% in W. The distance travelled to our center was higher for W but also increased for AA at 15.4 vs 69.3 and 15.2 vs 34.8 miles, respectively. Of note, review of regional transplant center data suggests the increased volume at our center is not related to redistribution between programs across GA and SC.

Conclusions: Our model confirms that academic outreach increases transplant referrals. The increase includes patients of minority thus may be an effective model to reduce healthcare disparities.

Background

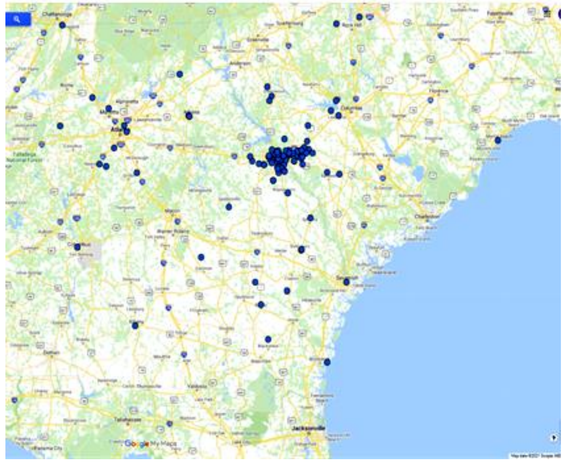
- Stem cell transplant (SCT) offers survival advantage in myeloma
- Racial disparities are evident with SCT rates lower in Black vs White populations
- When similar therapies are offered, outcomes in Black patients with MM is better than White patients.
- Referral for SCT to a transplant center is a barrier for SCT and cellular therapies.

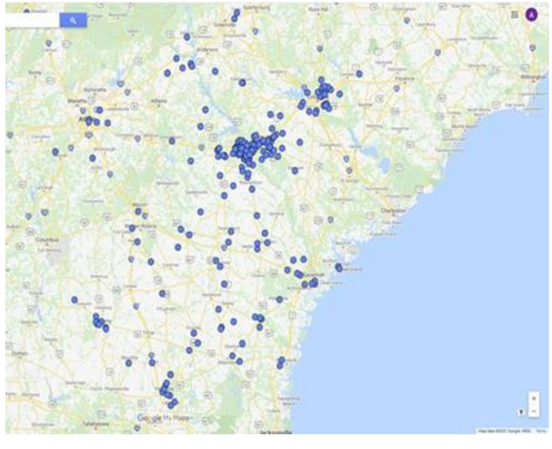
Materials & Methods

We reviewed all transplants (both autoSCT and alloSCT) performed at Augusta University between fiscal years 2015 to 2021. Patients were divided into two cohorts (cohort A: FY2014-17 and cohort B: FY2019-21) based on initiation of direct physician-to-physician outreach. In FY2018 we initiated a year-long aggressive outreach program which included our physicians visiting all practices within our catchment area. In addition, two outreach clinics were established in collaboration with large community practice sites in nearby towns. Statistics are descriptive.

Findings

- 389 transplants in the time period.
- Cohort B had a significant increase in transplants with 266 in cohort B vs 123 in cohort A, a 116% increase.
- Increase in median distance travelled to our center from 15.2 to 52.3 miles. Considering 15 miles as the city urban area, >60% of transplants in cohort B were from outside our urban area.
- Increase was 147% in AA compared to 96% in W, suggesting a greater reach to underrepresented minorities.
- Set up 2 outreach clinics with community onc





		FY2015-17 N=123 (%)	FY2019-21 N=266 (%)	p-value
Age				
	18-40	17 (13.9)	39 (14.7)	0.8264
	41-60	53 (43.1)	104 (39.1)	0.4561
	61+	53 (43.1)	123 (46.1)	0.5619
Gender				
	Male	65 (52.9)	147 (55.3)	0.6566
Race				
	White	73 (59.4)	143 (53.8) (**96%** increase)	
	AA	47 (38.2)	116 (43.6) (**147%** increase)	
	Others	3 (2.4)	7 (2.6)	
Distance to center (miles)				
	Mean	35.4	73.7	0.0000
	Median	15.2	53.2	
Distance by Race				
	White	15.4	69.3	0.0000
	AA	15.2	34.8	0.0002
Median Distance by Type				
	Auto	15.2	40.3	0.0000
	Allo	15.2	79.2	0.0001

Discussion

Our model confirms that academic outreach increases transplant referrals. The increase includes patients of minority thus may be an effective model to reduce healthcare disparities and improve access to SCT and cellular therapies.

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