

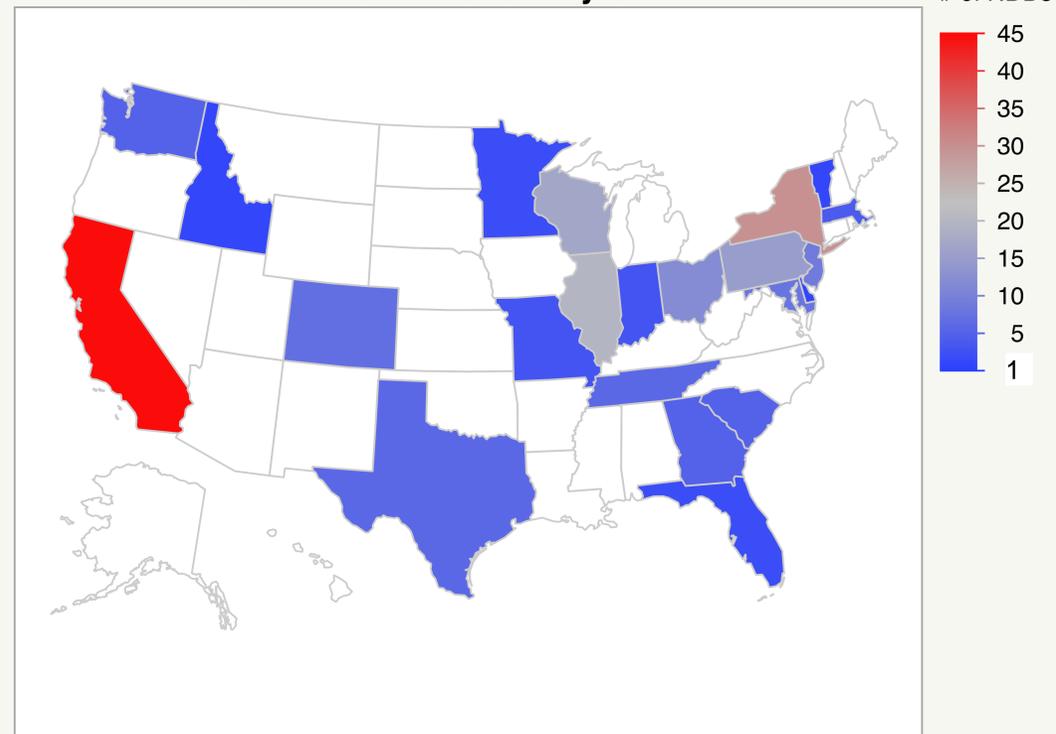
Introduction

Non-directed donors (NDDs) are individuals that donate kidneys to unrelated, anonymous recipients. NDDs in paired exchange programs expand the number of transplant chains that can occur since the flexibility of NDDs' choice of recipient enables chains to be created with maximum benefit to the whole. In the last decade in the United States, while the rates of NDDs increased from 20 to > 150 NDDs per year, very little is known about who decides to become an NDD and how many kidney transplants result. We assessed the demographic and clinical characteristics of 207 NDDs who donated at 57 transplant centers from 2008 to 2014 through the National Kidney Registry (NKR).

Methods

The NKR is a coalition of 57 transplant programs in the United States that pool their self-referred NDDs, incompatible pairs and compatible pairs willing to enter a kidney transplant exchange into a single database. Using a statistical algorithm, over 1200 national transplant chains have occurred, often beginning with a NDD. This is a retrospective study analyzing this database.

Non-Directed Donors by State



	Male	Female	Total
# of NDDs	92	115	207
Donor Race			
Caucasian	94.5%	93.9%	94.2%
African American	2.1%	1.7%	1.9%
Asian	2.1%	3.4%	2.8%
Latino	1.0%	0.8%	0.9%
Age			
Mean Age (yrs)	45	45	45
Median Age (yrs)	48	45	47
Age >50 (%)	44.5%	37.3%	41.0%
Blood type			
O	47.8%	46.0%	46.9%
A	35.8%	34.7%	35.2%
B	14.0%	16.5%	15.2%
AB	2.1%	2.6%	2.3%

Table 1. Demographic data of non-directed donors (NDDs) from the year 2008 to 2014 per the National Kidney Registry (NKR) database. No significant difference was seen between male and female groups.

Results

The majority of NDDs were Caucasian (94%) , with few being Asian (N=6), African-American (N=4) or Latino (N=2). Donors ranged from 20-71 years (median= 47) and were predominately female (55%). Almost half were blood types O (46%) with others being blood type A (35%), blood type B (15%) and blood type AB (2%) (**Table 1**). NKR NDD's were from across the country and were concentrated in states with high volume and/or multiple transplant centers (Fig 1). These NDDs donations resulted in 1005 total living donor kidney transplants.

Conclusions

The majority of NDDs in the NKR are of Caucasian race, female, and an average of 45 years old. The benefit of chains for patients of varying racial/ethnic groups is, in part, due to the generosity of these predominately Caucasian NDDs who donate for the greater good. To expand the pool of NDDs, studies are underway to elucidate these NDDs' motivations for donating , their educational needs, and why potential living donors of varying racial/ethnic groups decided not to donate as NDDs.