



# Large Decrease in Liver Waitlist Dropout Rate for MELD > 14

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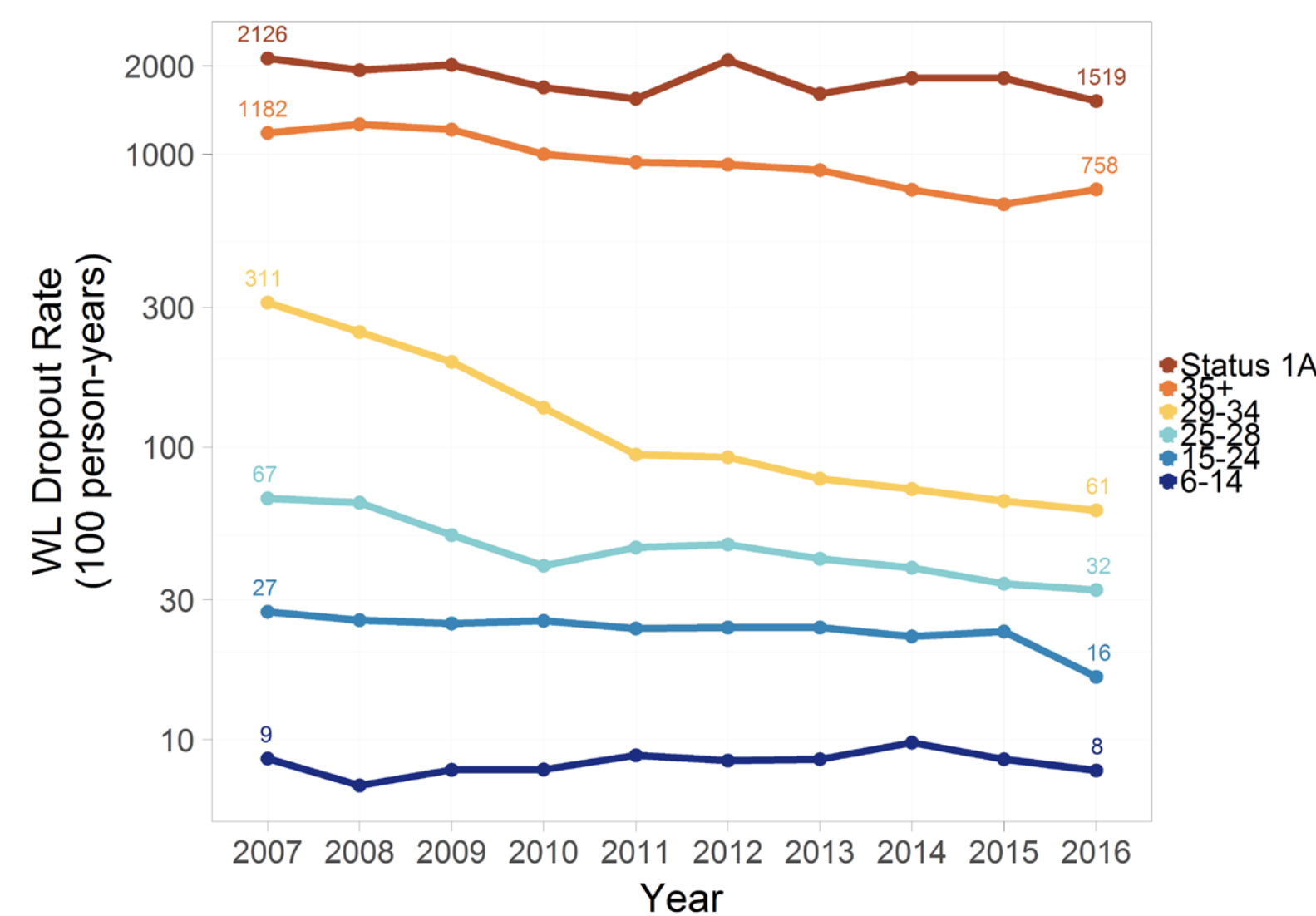
## Introduction

- Median MELD at transplant has increased steadily over the past 10 years
- One possible mechanism is decreased waitlist dropout rates, particularly among liver candidates with higher MELDs
- We evaluated the rate and hazard of waitlist dropout by MELD group

## Methods

- We selected active adult (18+) deceased donor liver candidates from the SRTR standard analysis files Jan 1, 2007-Dec 31, 2016
- Figure 1:
- Dropout (waitlist mortality or removal due to becoming too sick) rates were calculated by MELD group and year
- Table 1:
- Cox proportional hazard (PH) models were used to estimate the effect of year on the hazard of dropout by MELD group
- Multivariable models were adjusted for potential confounders: age, BMI, sex, blood type, race, Latino ethnicity, and private vs. public insurance

**Figure 1**  
Waiting List Dropout Rate by MELD Group



**Table 1**

Effect of Year on Hazard of Dropout by MELD Group, 2007-2016

MELD Group	Univariable		Multivariable	
	HR (95% CI)	P-value	HR (95% CI)	P-value
Status 1A	0.83 (0.64-1.08)	0.161	0.79 (0.60-1.03)	0.085
35+	0.60 (0.54-0.66)	<.0001	0.56 (0.50-0.62)	<.0001
29-34	0.37 (0.32-0.43)	<.0001	0.33 (0.29-0.38)	<.0001
25-28	0.60 (0.52-0.69)	<.0001	0.53 (0.46-0.61)	<.0001
15-24	0.75 (0.69-0.81)	<.0001	0.67 (0.62-0.72)	<.0001
6-14	1.36 (1.24-1.48)	<.0001	1.15 (1.05-1.26)	0.0024

**Table 2**

Percentage of Candidates on Waiting List by MELD Group, 2007-2016

MELD Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Status 1A	1.6%	1.3%	1.3%	1.1%	1.0%	0.9%	0.8%	0.9%	0.7%	0.7%
35+	4.0%	4.0%	4.4%	4.9%	5.1%	5.1%	5.5%	6.2%	6.4%	6.1%
29-34	5.0%	5.5%	6.4%	7.3%	8.3%	8.5%	9.1%	9.9%	10.1%	12.2%
25-28	8.5%	9.5%	10.6%	11.7%	12.7%	13.3%	14.0%	14.5%	14.5%	15.8%
15-24	33.7%	33.9%	33.7%	33.6%	33.4%	33.7%	33.4%	32.8%	31.8%	28.1%
6-14	47.2%	45.7%	43.7%	41.5%	39.6%	38.6%	37.2%	35.8%	36.6%	37.1%

## Results

- Dropout rates by MELD group decreased from 2007 to 2016, except for MELD group 6-14, which remained steady (Figure 1)
- The Status 1A and 35+ MELD groups had large absolute decreases (607 and 424 fewer dropouts per 100 person-years, respectively)
- The 29-34 MELD group had the largest relative decrease (80.4%)
- In Cox PH models, all MELD groups, except 6-14, had significant decreases in hazard of dropout over time (Table 1), especially in MELD group 29-34, where a candidate had one-third the hazard of dropout of a similar candidate 10 years prior
- Consistent with decreased dropout, the percentage of candidates waiting at MELDs greater than 24 has increased (Table 2)
- Results were similar in a subgroup of candidates without exception statuses

## Conclusions

- Dropout rates decreased dramatically over the past 10 years in all candidate groups with MELD >14, especially in the MELD 29-34 group
- As a result, more candidates are on the liver transplant waiting list with higher MELDs
- While more analysis is required to identify underlying causal factors, such as improved pretransplant care or changes in listing practices, lower dropout has likely contributed to increased MELD at transplant in this period