



Test Date Analysis, Kaplan Test Prep

07 March, 2019 Deval Shah, Data Sciences

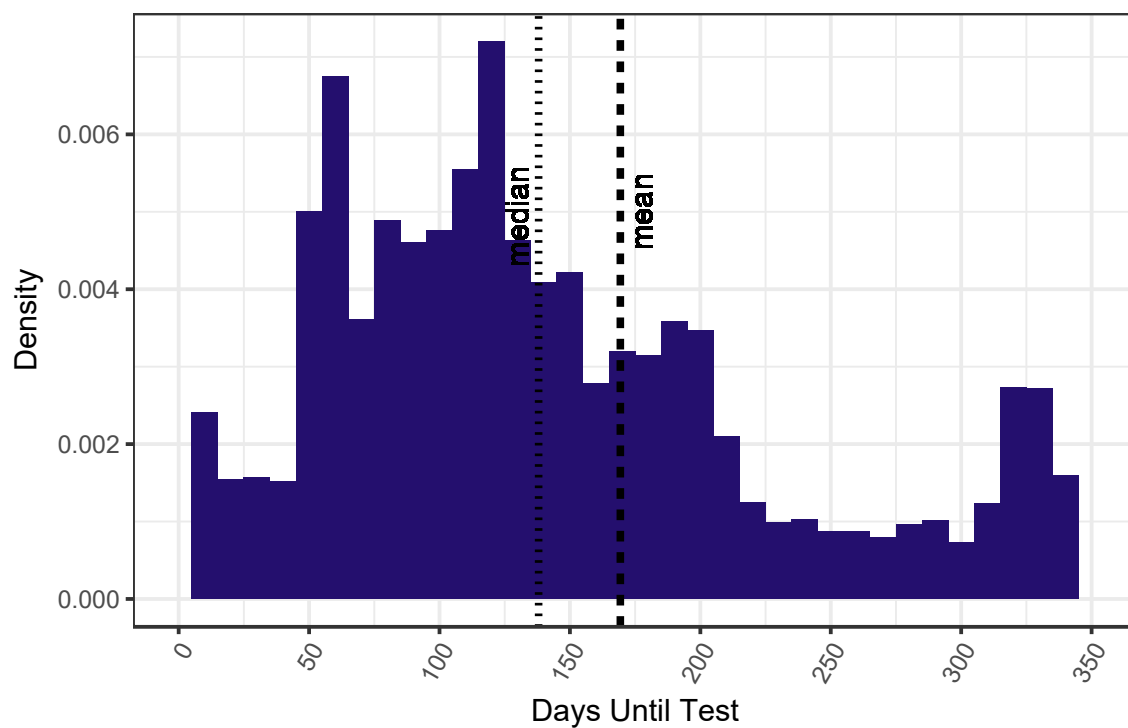
Introduction

This analysis was carried out to more accurately understand the projected test dates for enrollments in 2018. The dataset consists of 446020 enrollments in 2018, over 62 programs.

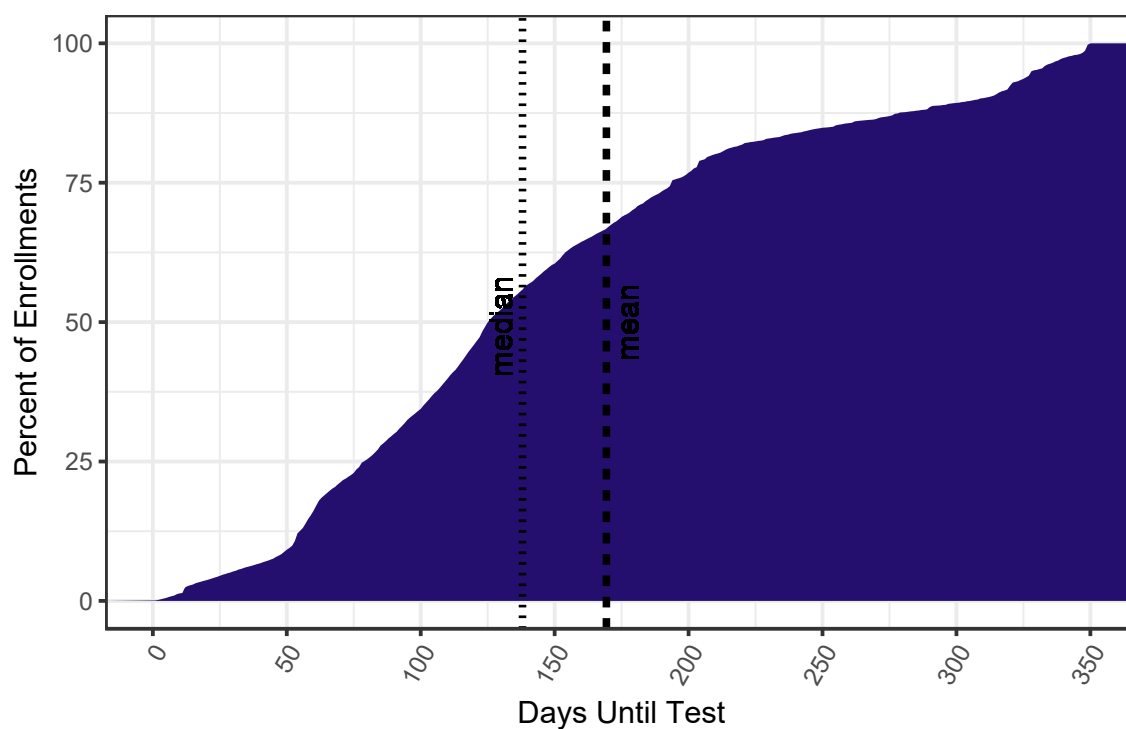
Test Date Anticipation

Students set their own test dates, for these enrollments. This section will explore how far ahead are these test dates from these enrollment start dates. We look at the distribution of how far away the students' test dates are from both their enrollment creation date and their enrollment start date. The mean and median are labeled on the respective graphs. We have excluded rapid review products (29000 rapid review products, with an average 6.5 days from class start date to test date), because this skews the analysis greatly. Below each density plot, we have a plot of the cumulative distribution of each time-until-testdate comparison, for clarity.

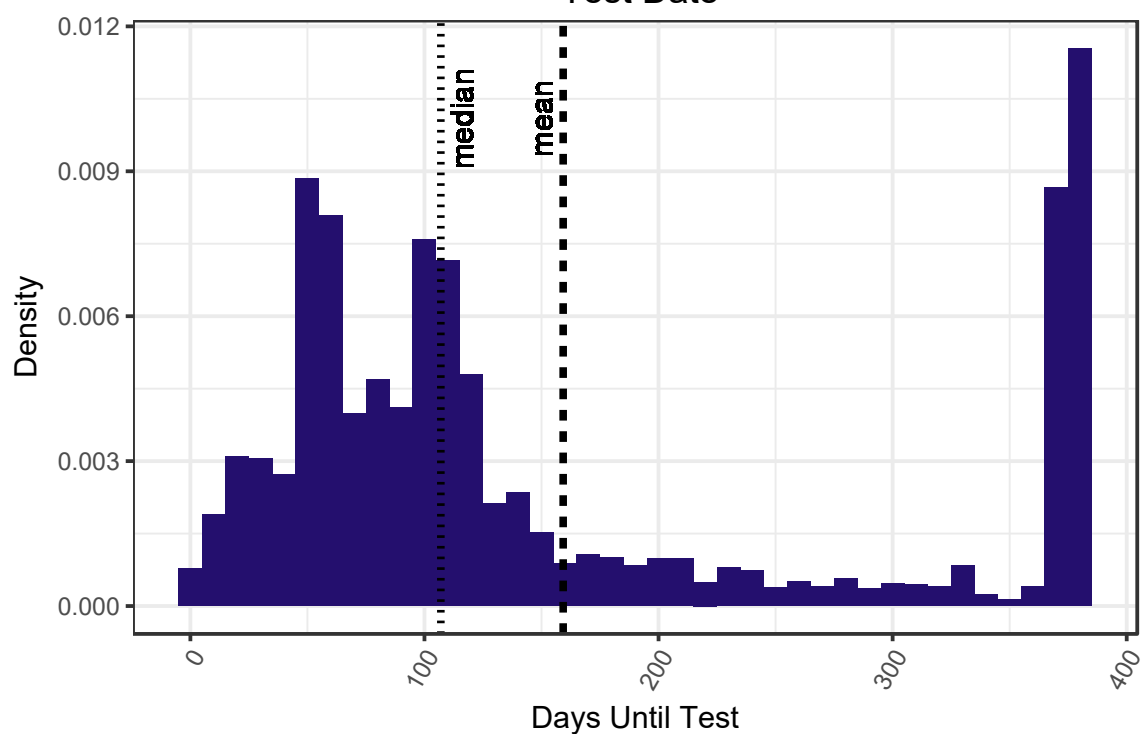
Distribution of Time Between
Enrollment Entry Date and
Test Date



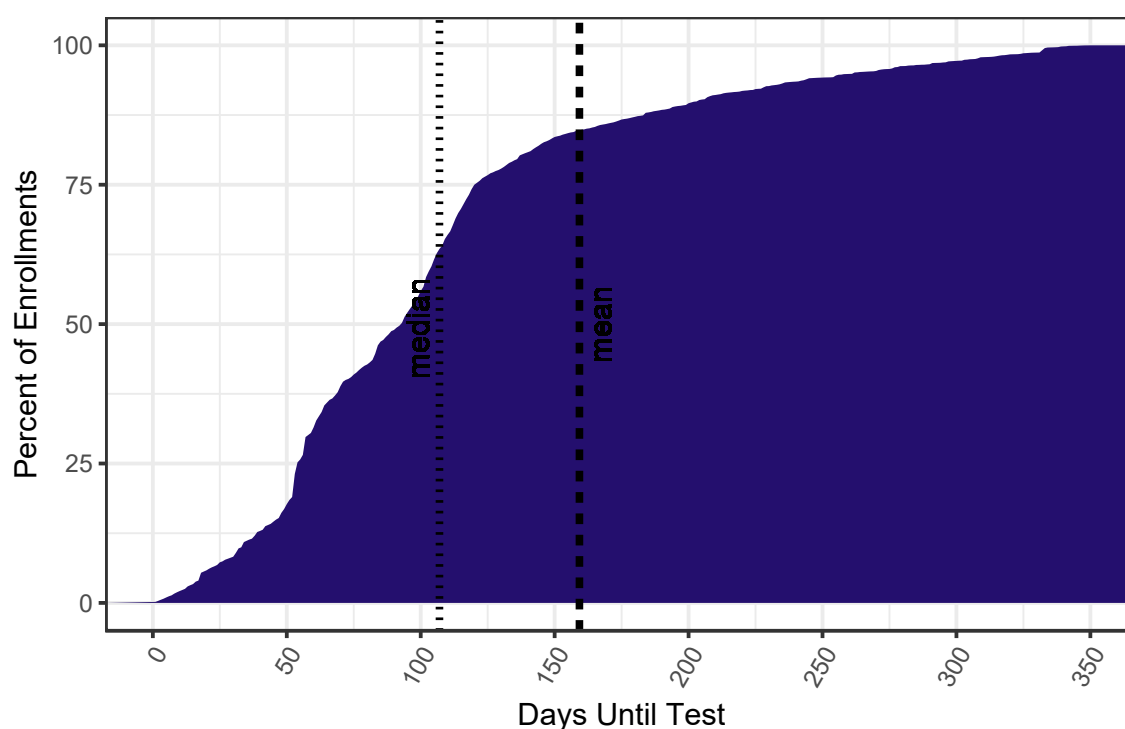
Cumulative Distribution of Time Between
Enrollment Entry Date and
Test Date



Distribution of Time Between
Enrollment Start Date and
Test Date



Cumulative Distribution of Time Between Enrollment Start Date and Test Date



Product Type / Delivery Type Differences

We separate out the different product and delivery types, and explore the differences between these groups, excluding outliers.

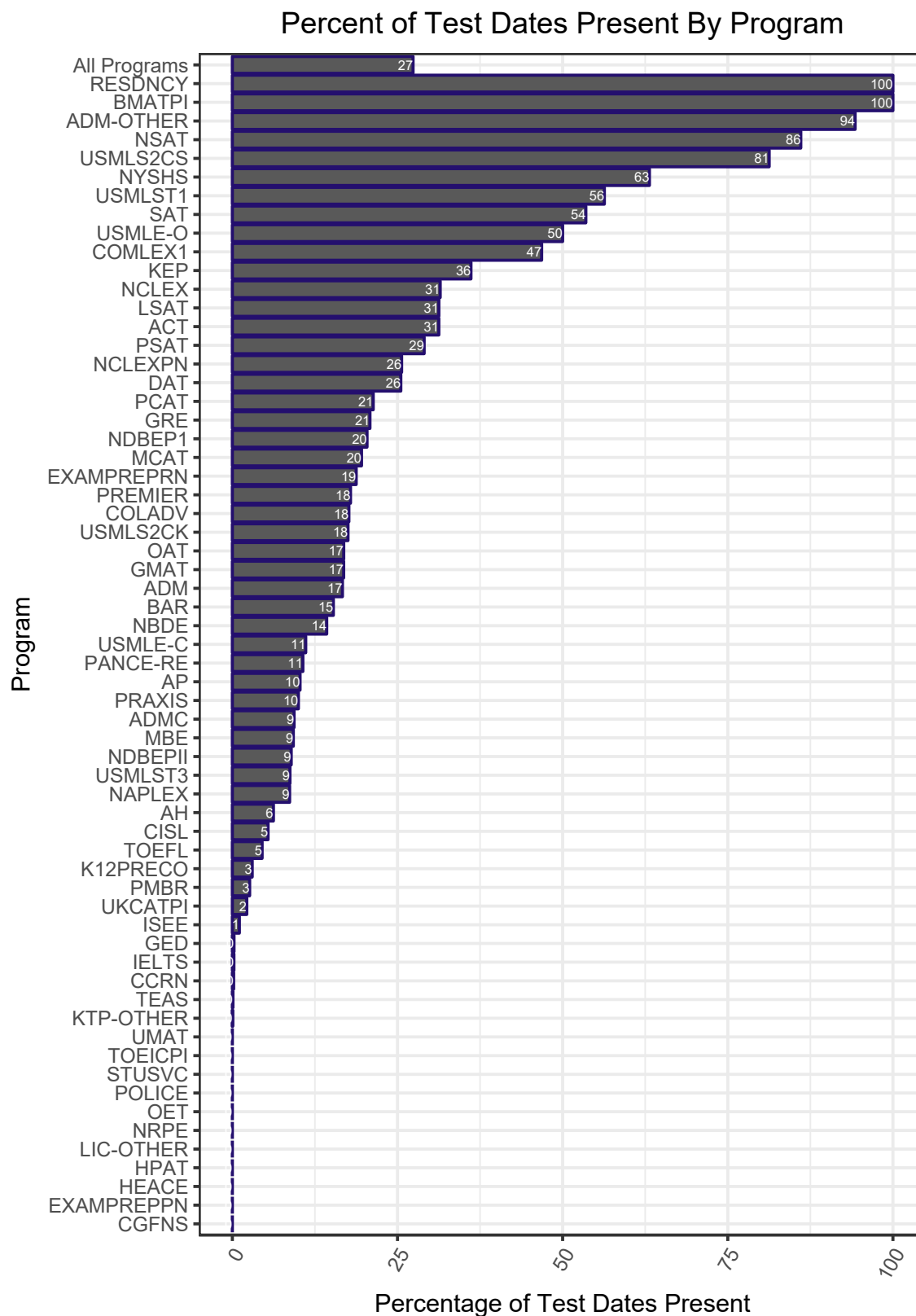
- TestDate_Present measures the number of observations that have a test date present
- TestDate_Present_Percent measures the percent of observations that have a test date present in that group
- Mean_Test_To_Class measures the days in between class start date and test date
- Mean_Test_To_Enroll measures the days in between enrollment entry date and test date

Keep in mind, NAs occur when there are no observations with both a valid class start date and a valid test date.

product_type	product_delivery	SampleSize	TestDate_Present	Mean_Test_To_Start	Mean_Test_To_Enroll
Comprehensive	In Person	91194	37.75	81.62	121.5
Comprehensive	Live Online	46515	33.2	83.32	101.7
Comprehensive	Other	3226	17.95	563.5	567.6
Comprehensive	Self-Paced	114161	10.97	165.8	168.8
Maker Prep	In Person	327	11.62	28.1	28.1
Maker Prep	Live Online	435	14.02	57.55	29.23
Maker Prep	Other	2	0	NA	NA
Maker Prep	Owned	2014	18.67	352.1	356
Maker Prep	Self-Paced	68863	19.83	214.8	272.6
Other	In Person	26	34.62	439.2	196.6
Other	Live Online	182	34.62	268.5	108.9
Other	Other	473	24.31	125.7	81.68
Other	Owned	36840	80.14	340.8	299.3
Other	Self-Paced	8015	0.39	32.43	32.57
Tutoring	In Person	5523	14.87	95.1	94.95
Tutoring	Live Online	5113	19.11	87.7	87.7
Uncategorized	Uncategorized	34110	15.97	50.81	55.55
Comprehensive	All	255096	24.69	86.47	120.5

product_type	product_delivery	SampleSize	TestDate_Present	Mean_Test_To_Start	Mean_Test_To_Enroll
Maker Prep	All	71641	19.72	216.5	275.2
Other	All	45536	65.31	340.1	298.7
Tutoring	All	10636	16.9	91.39	91.32
Uncategorized	All	34110	15.97	50.81	55.55
All	In Person	97070	36.36	81.54	121
All	Live Online	52245	31.67	82.88	101.1
All	Other	3701	18.75	521.8	536.5
All	Owned	38854	76.95	340.3	299.1
All	Self-Paced	191039	13.72	195.9	227.1
All	Uncategorized	34110	15.97	50.81	55.55

We close this analysis by aggregating the percentage of enrollments that have a test date available, per program. We represent this data in both graphical and table format.



program	SampleSize	TestDate_Present	TestDate_Present_Percent
ACT	6187	1934	31.26
ADM	6	1	16.67
ADM-OTHER	4999	4713	94.28
ADMC	813	76	9.35
AH	209	13	6.22
AP	478	49	10.25
BAR	56415	8627	15.29
BMATPI	2	2	100
CCRN	498	1	0.2
CGFNS	10	0	0
CISL	37	2	5.41
COLADV	3310	584	17.64
COMLEX1	897	420	46.82
DAT	3521	898	25.5
EXAMPREPPN	20	0	0
EXAMPREPRN	16	3	18.75
GED	4759	12	0.25
GMAT	14625	2465	16.85
GRE	26186	5455	20.83
HEACE	2	0	0
HPAT	57	0	0
IELTS	3792	9	0.24
ISEE	282	3	1.06
K12PRECO	2526	76	3.01
KEP	1542	557	36.12
KTP-OTHER	14652	6	0.04
LIC-OTHER	56	0	0
LSAT	25698	8034	31.26
MBE	2448	226	9.23
MCAT	43227	8454	19.56
NAPLEX	1649	143	8.67
NBDE	7	1	14.29
NCLEX	50271	15819	31.47
NCLEXP	6263	1605	25.63
NDBEP1	716	146	20.39
NDBEPII	359	32	8.91
NRPE	365	0	0
NSAT	380	327	86.05
NYSHS	879	555	63.14
OAT	2390	403	16.86
OET	4037	0	0
PANCE-RE	1180	126	10.68
PCAT	1280	273	21.33
PMBR	1106	29	2.62
POLICE	98	0	0
PRAXIS	150	15	10
PREMIER	2029	363	17.89
PSAT	1226	356	29.04
RESDNCY	25	25	100
SAT	21899	11719	53.51
STUSVC	2	0	0
TEAS	7304	5	0.07
TOEFL	7519	339	4.51
TOEICPI	9	0	0
UKCATPI	5578	122	2.19
UMAT	26	0	0
USMLE-C	27	3	11.11

program	SampleSize	TestDate_Present	TestDate_Present_Percent
USMLE-O	2	1	50
USMLS2CK	13376	2342	17.51
USMLS2CS	1783	1449	81.27
USMLST1	61669	34731	56.32
USMLST3	6145	536	8.72
All Programs	417019	114085	27.36