**S3 Table. Descriptions of Variables Used in the Proposed Model.**

| **Variable Name** | **Description** | **Categories** |
| --- | --- | --- |
| AGE | Recipient age (yrs) | NA |
| AGE\_DON | Donor age (yrs) | NA |
| ANY\_DIAL | Recipient on dialysis any time between registration and transplant | NO, NOT\_KNOWN, YES |
| COD\_CAD\_DON | Deceased donor-cause of death | ANOXIA, CEREBROVASCULAR/STROKE, CNS TUMOR, HEAD TRAUMA, NOT\_KNOWN, OTHER SPECIFY |
| COLD\_ISCH\_KI | Kidney cold ischemic time (hours) | NA |
| CREAT\_TRR | Recipient serum creatinine at time of transplant | NA |
| DEATH\_MECH\_DON | Deceased donor-mechanism of death | ASPHYXIATION, BLUNT INJURY, CARDIOVASCULAR, DEATH FROM NATURAL CAUSES, DROWNING, DRUG INTOXICATION, ELECTRICAL, INTRACRANIAL HEMORRHAGE/STROKE, NONE OF THE ABOVE, NOT\_KNOWN, SEIZURE, SIDS, STAB OR GUNSHOT WOUND |
| DIAB | Recipient diabetes at registration | NO, NOT\_KNOWN, YES |
| DIAG\_KI | Kidney recipient primary diagnosis at transplant | GROUP\_1\*, GROUP\_2\*, GROUP\_3\*, GROUP\_4\*, GROUP\_5\*, GROUP\_6\*, GROUP\_7\*, GROUP\_8\*, NOT\_KNOWN |
| DRUGTRT\_COPD | Recipient drug treated COPD at registration | NO, NOT\_KNOWN, YES |
| ETHCAT | Recipient ethnicity category | AMER IND/ALASKA NATIVE, ASIAN, BLACK, HISPANIC, MULTIRACIAL, NATIVE HAWAIIAN/OTHER PACIFIC ISLANDER, NOT\_KNOWN, WHITE |
| FUNC\_STAT\_TRR | Recipient functional status at transplant | 10-20 PERCENT VERY SICK HOSPITALIZATION NECESSARY, 30-50 PERCENT REQUIRES CONSIDERABLE ASSISTANCE BUT DEATH NOT IMMINENT, 60-70 PERCENT PERFORMS ACTIVITIES OF DAILY LIVING WITH SOME ASSISTANCE, 80-100 PERCENT PERFORMS ACTIVITIES OF DAILY LIVING WITH NO ASSISTANCE, NOT APPLICABLE (PATIENT < 1 YEAR OLD), NOT\_KNOWN, PERFORMS ACTIVITIES OF DAILY LIVING WITH TOTAL ASSISTANCE. |
| HCV\_SEROSTATUS | Recipient HCV status | NEGATIVE, NOT DONE, NOT\_KNOWN, POSITIVE |
| HIST\_DIABETES\_DON | Deceased donor-history of diabetes, including duration of disease | NO, NOT\_KNOWN, YES |
| HIST\_HYPERTENS\_DON | Deceased donor-history of hypertension  | NO, NOT\_KNOWN, YES |
| MED\_COND\_TRR | Recipient medical condition pre-transplant at transplant | HOSPITALIZED NOT IN ICU, IN INTENSIVE CARE UNIT, NOT HOSPITALIZED |
| PAYMENTSOURCE\_AT\_TRANSPLANT | Recipient primary payment source | CHIP, DONATION OR FREE CARE, MEDICAID, MEDICARE, NOT\_KNOWN, OTHER, OTHER GOVERNMENT OR DEPARTMENT OF VA, SELF, SOME PRIVATE BY PRIMARY OR SECONDARY |
| REGION | UNOS region where transplanted | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 |

\*See S2 Table for variable values in this group.