The CONTENTS Procedure

| Data Set Name | WORK.DATA_FINAL | Observations | 3258 |
|---------------------|---|-----------------------------|------|
| Member Type | DATA | Variables | 18 |
| Engine | V9 | Indexes | 0 |
| Created | 12/10/2017 23:17:04 | Observation Length | 176 |
| Last Modified | 12/10/2017 23:17:04 | Deleted Observations | 0 |
| Protection | | Compressed | NO |
| Data Set Type | | Sorted | NO |
| Label | | | |
| Data Representation | SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64 | | |
| Encoding | utf-8 Unicode (UTF-8) | | |

| | Engine/Host Dependent Information | | | | | |
|----------------------------|--|--|--|--|--|--|
| Data Set Page Size | 131072 | | | | | |
| Number of Data Set Pages | 5 | | | | | |
| First Data Page | 1 | | | | | |
| Max Obs per Page | 743 | | | | | |
| Obs in First Data Page | 720 | | | | | |
| Number of Data Set Repairs | 0 | | | | | |
| Filename | /saswork/SAS_workA57E00007089_odaws02-prod-us/SAS_work22DB00007089_odaws02-prod-us/data_final.sas7bdat | | | | | |
| Release Created | 9.0401M4 | | | | | |
| Host Created | Linux | | | | | |
| Inode Number | 49283089 | | | | | |
| Access Permission | rw-r | | | | | |
| Owner Name | ag39140 | | | | | |
| File Size | 768KB | | | | | |
| File Size (bytes) | 786432 | | | | | |

| Alphabetic List of Variables and Attributes | | | | | | | | | |
|---|--------------------------|------|---|---------|---------|--|--|--|--|
| # | Variable Type Len Format | | | | | | | | |
| 2 | Month | Char | 9 | \$9. | \$9. | | | | |
| 4 | ageyear | Num | 8 | BEST12. | BEST32. | | | | |
| 16 | bpdiastolic | Num | 8 | BEST12. | BEST32. | | | | |
| 11 | bpsystolic | Num | 8 | BEST12. | BEST32. | | | | |
| 18 | cindex_cat | Char | 6 | \$6. | \$6. | | | | |
| 3 | evisit | Num | 8 | BEST12. | BEST32. | | | | |

| | Alphabetic Lis | st of Var | iables | and Attribu | tes |
|----|-----------------|-----------|--------|-------------|----------|
| # | Variable | Туре | Len | Format | Informat |
| 9 | facilityname | Char | 27 | \$27. | \$27. |
| 5 | gender | Char | 6 | \$6. | \$6. |
| 14 | heartrate | Num | 8 | BEST12. | BEST32. |
| 10 | insurancetype | Char | 8 | \$8. | \$8. |
| 1 | is30dayreadmit | Num | 8 | BEST12. | BEST32. |
| 17 | log_losday | Num | 8 | BEST12. | BEST32. |
| 8 | maritalstatus | Char | 7 | \$7. | \$7. |
| 12 | o2sat | Num | 8 | BEST12. | BEST32. |
| 6 | race | Char | 18 | \$18. | \$18. |
| 7 | religion | Char | 9 | \$9. | \$9. |
| 15 | respirationrate | Num | 8 | BEST12. | BEST32. |
| 13 | temperature | Num | 8 | BEST12. | BEST32. |

| Data Set | WORK.DATA_FINAL |
|--------------------------------|--------------------|
| Dependent Variable | log_losday |
| Selection Method | Stepwise |
| Select Criterion | Significance Level |
| Stop Criterion | Significance Level |
| Entry Significance Level (SLE) | 0.15 |
| Stay Significance Level (SLS) | 0.15 |
| Effect Hierarchy Enforced | None |

| Number of Observations Read | 3258 |
|-----------------------------|------|
| Number of Observations Used | 3258 |

| | Class Level Information | | | | | | |
|---------------|-------------------------|---|--|--|--|--|--|
| Class | Levels | Values | | | | | |
| gender | 2 | Female Male | | | | | |
| race | 4 | African Amer/Black Asian Other White | | | | | |
| religion | 7 | Catholic Christian Hindu Islam Jewish No Affili Other | | | | | |
| maritalstatus | 5 | Divorce Married Separat Single Widowed | | | | | |
| insurancetype | 3 | Medicaid Medicare Private | | | | | |

| | Class Level Information | | | | | | |
|----------------|-------------------------|---|--|--|--|--|--|
| Class | Levels | Values | | | | | |
| facilityname | 7 | LIJ Forest Hills LIJ Valley Stream Long Island Jewish Hospital NSUH Other Plainview Hospital Southside Hospital | | | | | |
| is30dayreadmit | 2 | 0 1 | | | | | |
| cindex_cat | 4 | Mild Modera Normal severe | | | | | |
| evisit | 5 | 01234 | | | | | |

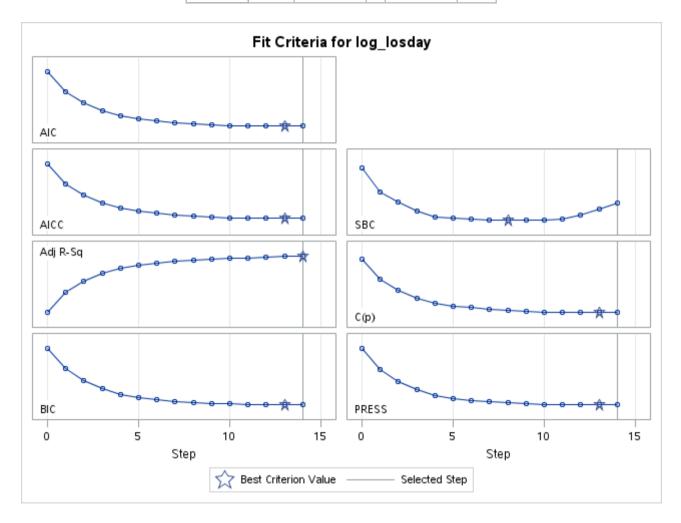
| Dimensions | |
|----------------------|----|
| Number of Effects | 17 |
| Number of Parameters | 47 |

| | Stepwise Selection Summary | | | | | | | | | | | | | | |
|------|----------------------------|-------------------|----------------------|--------------------|-------------------|----------------------|---------------|--------------|-------------|----------|-------------|------------|--------|---------|--------|
| Step | Effect Entered | Effect Removed | Number Effects In | Number Parms In | Model R-Square | Adjusted R-Square | AIC | AICC | BIC | СР | SBC | PRESS | ASE | F Value | Pr > F |
| 0 | Intercept | | 1 | 1 | 0.0000 | 0.0000 | 2525.9290 | 2525.9327 | -732.3575 | 476.5326 | -727.9821 | 2600.7510 | 0.7978 | 0.00 | 1.0000 |
| 1 | ageyear | | 2 | 2 | 0.0456 | 0.0453 | 2375.8583 | 2375.8657 | -882.4980 | 308.3159 | -871.9639 | 2483.6852 | 0.7614 | 155.58 | <.0001 |
| 2 | evisit | | 3 | 6 | 0.0720 | 0.0706 | 2292.3648 | 2292.3993 | -966.3548 | 217.6680 | -931.1020 | 2420.9271 | 0.7403 | 23.15 | <.0001 |
| 3 | bpsystolic | | 4 | 7 | 0.0901 | 0.0885 | 2230.1689 | 2230.2133 | -1028.4036 | 152.0877 | -987.2090 | 2375.2719 | 0.7259 | 64.69 | <.0001 |
| 4 | heartrate | | 5 | 8 | 0.1021 | 0.1002 | 2188.9533 | 2189.0087 | -1069.4939 | 109.3378 | -1022.3358 | 2346.4482 | 0.7163 | 43.40 | <.0001 |
| 5 | cindex_cat | | 6 | 11 | 0.1098 | 0.1071 | 2166.8863 | 2166.9825 | -1091.5421 | 86.5907 | -1026.1361 | 2330.7681 | 0.7102 | 9.36 | <.0001 |
| 6 | is30dayreadmit | | 7 | 12 | 0.1144 | 0.1114 | 2152.1751 | 2152.2873 | -1106.1709 | 71.5918 | -1034.7585 | 2320.3054 | 0.7065 | 16.69 | <.0001 |
| 7 | insurancetype | | 8 | 14 | 0.1194 | 0.1159 | 2137.7224 | 2137.8704 | -1120.5242 | 56.9225 | -1037.0335 | 2310.3171 | 0.7025 | 9.21 | 0.0001 |
| 8 | respirationrate | | 9 | 15 | 0.1225 | 0.1187 | 2128.0643 | 2128.2322 | -1130.0931 | 47.1820 | -1040.6026* | 2304.6546 | 0.7000 | 11.63 | 0.0007 |
| 9 | bpdiastolic | | 10 | 16 | 0.1246 | 0.1206 | 2122.3215 | 2122.5104 | -1135.7707 | 41.4075 | -1040.2566 | 2300.6155 | 0.6984 | 7.71 | 0.0055 |
| 10 | gender | | 11 | 17 | 0.1260 | 0.1217 | 2119.0771 | 2119.2882 | -1138.9662 | 38.1522 | -1037.4122 | 2298.3187 | 0.6972 | 5.22 | 0.0224 |
| 11 | temperature | | 12 | 18 | 0.1272 | 0.1226 | 2116.6773 | 2116.9120 | -1141.3200 | 35.7498 | -1033.7231 | 2297.7583 | 0.6963 | 4.38 | 0.0365 |
| 12 | maritalstatus | | 13 | 22 | 0.1298 | 0.1241 | 2115.1489 | 2115.4902 | -1142.7189 | 34.2360 | -1010.8960 | 2296.3376 | 0.6943 | 2.37 | 0.0504 |
| 13 | facilityname | | 14 | 28 | 0.1334 | 0.1261 | 2113.6007* | 2114.1397* | -1143.9971* | 32.7565* | -975.9110 | 2295.1463* | 0.6914 | 2.24 | 0.0366 |
| 14 | religion | | 15 | 34 | 0.1364 | 0.1276* | 2114.0894 | 2114.8715 | -1143.1798 | 33.3475 | -938.8891 | 2295.4571 | 0.6889 | 1.90 | 0.0768 |
| | | | | | 1 | * (| Optimal Value | of Criterion | | | | | | | |

Selection stopped because the candidate for entry has SLE > 0.15 and the candidate for removal has SLS < 0.15.

| Stop Details | | | | | | |
|------------------|--------|---------------------------|-------------------------|--|--|--|
| Candidate For | Effect | Candidate Significance | Compare Significance | | | |

| | Stop Details | | | | | | | |
|--|--------------|--------|---|--------|-------|--|--|--|
| Candidate Compare For Effect Significance Significance | | | | | | | | |
| Entry | o2sat | 0.1780 | > | 0.1500 | (SLE) | | | |
| Removal | religion | 0.0768 | < | 0.1500 | (SLS) | | | |



The GLMSELECT Procedure Selected Model

The selected model is the model at the last step (Step 14).

Effects: Intercept is30dayreadmit cindex_cat evisit ageyear bpsystolic temperature heartrate respirationrate gender religion maritalstatus insurancetype facilityname bpdiastolic

12/10/2017

| Analysis of Variance | | | | | | | | | | |
|----------------------------------|------|------------|----------|-------|--|--|--|--|--|--|
| Source DF Squares Square F Value | | | | | | | | | | |
| Model | 33 | 354.57180 | 10.74460 | 15.43 | | | | | | |
| Error | 3224 | 2244.58288 | 0.69621 | | | | | | | |
| Corrected Total | 3257 | 2599.15468 | | | | | | | | |

| Root MSE | 0.83439 |
|----------------|-------------|
| Dependent Mean | 1.32204 |
| R-Square | 0.1364 |
| Adj R-Sq | 0.1276 |
| AIC | 2114.08938 |
| AICC | 2114.87150 |
| BIC | -1143.17982 |
| C(p) | 33.34747 |
| PRESS | 2295.45707 |
| SBC | -938.88909 |
| ASE | 0.68895 |
| | |

| Parameter Estimates | | | | | | | | |
|---------------------|----|-----------|-------------------|---------|--|--|--|--|
| Parameter | DF | Estimate | Standard Error | t Value | | | | |
| Intercept | 1 | -0.205714 | 0.696480 | -0.30 | | | | |
| is30dayreadmit 0 | 1 | -0.162933 | 0.044013 | -3.70 | | | | |
| is30dayreadmit 1 | 0 | 0 | | | | | | |
| cindex_cat Mild | 1 | -0.159696 | 0.042364 | -3.77 | | | | |
| cindex_cat Modera | 1 | -0.041831 | 0.054911 | -0.76 | | | | |
| cindex_cat Normal | 1 | -0.184713 | 0.045497 | -4.06 | | | | |
| cindex_cat severe | 0 | 0 | | | | | | |
| evisit 0 | 1 | -0.223617 | 0.042068 | -5.32 | | | | |
| evisit 1 | 1 | -0.194867 | 0.045019 | -4.33 | | | | |
| evisit 2 | 1 | -0.100069 | 0.049196 | -2.03 | | | | |
| evisit 3 | 1 | 0.043355 | 0.056737 | 0.76 | | | | |
| evisit 4 | 0 | 0 | | | | | | |
| ageyear | 1 | 0.010154 | 0.001129 | 8.99 | | | | |
| bpsystolic | 1 | -0.004476 | 0.001108 | -4.04 | | | | |
| temperature | 1 | 0.038877 | 0.018039 | 2.16 | | | | |
| heartrate | 1 | 0.007610 | 0.001182 | 6.44 | | | | |

| Parameter Estimates | | | | | | | | |
|--|----|-----------|-------------------|---------|--|--|--|--|
| Parameter | DF | Estimate | Standard Error | t Value | | | | |
| respirationrate | 1 | 0.017642 | 0.005533 | 3.19 | | | | |
| gender Female | 1 | -0.086273 | 0.031243 | -2.76 | | | | |
| gender Male | 0 | 0 | | | | | | |
| religion Catholic | 1 | -0.093333 | 0.076990 | -1.21 | | | | |
| religion Christian | 1 | -0.056802 | 0.079018 | -0.72 | | | | |
| religion Hindu | 1 | -0.025236 | 0.109450 | -0.23 | | | | |
| religion Islam | 1 | -0.265374 | 0.113478 | -2.34 | | | | |
| religion Jewish | 1 | -0.133377 | 0.084344 | -1.58 | | | | |
| religion No Affili | 1 | -0.207229 | 0.100809 | -2.06 | | | | |
| religion Other | 0 | 0 | | | | | | |
| maritalstatus Divorce | 1 | -0.025469 | 0.067906 | -0.38 | | | | |
| maritalstatus Married | 1 | -0.057487 | 0.044428 | -1.29 | | | | |
| maritalstatus Separat | 1 | 0.105005 | 0.130629 | 0.80 | | | | |
| maritalstatus Single | 1 | 0.063522 | 0.053186 | 1.19 | | | | |
| maritalstatus Widowed | 0 | 0 | | | | | | |
| insurancetype Medicaid | 1 | 0.238925 | 0.072379 | 3.30 | | | | |
| insurancetype Medicare | 1 | 0.083278 | 0.034943 | 2.38 | | | | |
| insurancetype Private | 0 | 0 | | | | | | |
| facilityname LIJ Forest Hills | 1 | -0.009132 | 0.054715 | -0.17 | | | | |
| facilityname LIJ Valley Stream | 1 | 0.049498 | 0.062626 | 0.79 | | | | |
| facilityname Long Island Jewish Hospital | 1 | 0.002722 | 0.051616 | 0.05 | | | | |
| facilityname NSUH | 1 | 0.114921 | 0.049477 | 2.32 | | | | |
| facilityname Other | 1 | -0.108705 | 0.104699 | -1.04 | | | | |
| facilityname Plainview Hospital | 1 | 0.081140 | 0.063161 | 1.28 | | | | |
| facilityname Southside Hospital | 0 | 0 | | | | | | |
| bpdiastolic | 1 | -0.006469 | 0.001882 | -3.44 | | | | |

| Data Set | WORK.DATA_FINAL |
|--------------------|--------------------|
| Dependent Variable | log_losday |
| Selection Method | Stepwise |
| Select Criterion | Significance Level |
| Stop Criterion | Significance Level |

| Entry Significance Level (SLE) | 0.15 |
|--------------------------------|------|
| Stay Significance Level (SLS) | 0.15 |
| Effect Hierarchy Enforced | None |

| Number of Observations Read | 3258 |
|-----------------------------|------|
| Number of Observations Used | 3258 |

| Class Level Information | | | | | | | |
|-------------------------|--------|---|--|--|--|--|--|
| Class | Levels | Values | | | | | |
| gender | 2 | Female Male | | | | | |
| race | 4 | African Amer/Black Asian Other White | | | | | |
| religion | 7 | Catholic Christian Hindu Islam Jewish No Affili Other | | | | | |
| maritalstatus | 5 | Divorce Married Separat Single Widowed | | | | | |
| insurancetype | 3 | Medicaid Medicare Private | | | | | |
| facilityname | 7 | LIJ Forest Hills LIJ Valley Stream Long Island Jewish Hospital NSUH Other Plainview Hospital Southside Hospital | | | | | |
| is30dayreadmit | 2 | 0 1 | | | | | |
| cindex_cat | 4 | Mild Modera Normal severe | | | | | |
| evisit | 5 | 01234 | | | | | |

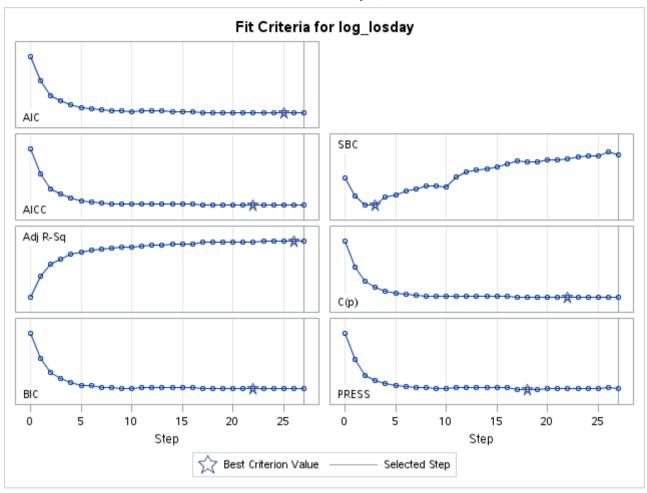
| Dimensions | | | | | |
|----------------------|-----|--|--|--|--|
| Number of Effects | 121 | | | | |
| Number of Parameters | 952 | | | | |

| | Stepwise Selection Summary | | | | | | | | | | | | | | |
|------|----------------------------|-------------------|----------------------|--------------------|-------------------|----------------------|-----------|-----------|------------|----------|-------------|-----------|--------|---------|--------|
| Step | Effect Entered | Effect Removed | Number Effects In | Number Parms In | Model R-Square | Adjusted R-Square | AIC | AICC | BIC | СР | SBC | PRESS | ASE | F Value | Pr > F |
| 0 | Intercept | | 1 | 1 | 0.0000 | 0.0000 | 2525.9290 | 2525.9327 | -732.4087 | 564.4201 | -727.9821 | 2600.7510 | 0.7978 | 0.00 | 1.0000 |
| 1 | ageyear*heartrate | | 2 | 2 | 0.0617 | 0.0614 | 2320.5323 | 2320.5397 | -937.8490 | 330.8000 | -927.2900 | 2442.7030 | 0.7486 | 214.01 | <.0001 |
| 2 | bpsystolic*evisit | | 3 | 7 | 0.0990 | 0.0973 | 2198.4517 | 2198.4961 | -1060.3039 | 198.3773 | -1018.9262 | 2353.1159 | 0.7188 | 26.90 | <.0001 |
| 3 | is30dayre*cindex_cat | | 4 | 14 | 0.1157 | 0.1122 | 2151.2679 | 2151.4160 | -1107.7320 | 148.3342 | -1023.4879* | 2320.2358 | 0.7055 | 8.79 | <.0001 |
| 4 | insurance*facilityna | | 5 | 34 | 0.1354 | 0.1265 | 2117.9851 | 2118.7673 | -1140.9456 | 113.1930 | -934.9933 | 2302.3993 | 0.6898 | 3.67 | <.0001 |
| 5 | respirati*facilityna | | 6 | 41 | 0.1451 | 0.1344 | 2095.3518 | 2096.4753 | -1162.8556 | 90.2595 | -915.0046 | 2290.8298 | 0.6821 | 5.20 | <.0001 |
| 6 | gender*maritalstatus | | 7 | 50 | 0.1511 | 0.1382 | 2090.0849 | 2091.7393 | -1167.4531 | 85.0167 | -865.4716 | 2287.0329 | 0.6772 | 2.55 | 0.0063 |
| 7 | ageyear*maritalstatu | | 8 | 55 | 0.1572 | 0.1429 | 2076.8980 | 2078.8924 | -1179.8047 | 72.0184 | -848.2142 | 2278.4585 | 0.6724 | 4.58 | 0.0004 |

* Optimal Value of Criterion

| | Stepwise Selection Summary | | | | | | | | | | | | | | |
|------|----------------------------|----------------------|----------------------|--------------------|-------------------|-------------------|-----------------|------------|-------------|----------|-----------|------------|--------|---------|--------|
| Step | Effect Entered | Effect Removed | Number Effects In | Number Parms In | Model R-Square | Adjusted R-Square | AIC | AICC | BIC | СР | SBC | PRESS | ASE | F Value | Pr > F |
| 8 | facilityn*is30dayrea | | 9 | 61 | 0.1615 | 0.1457 | 2072.2160 | 2074.6611 | -1183.7119 | 67.5730 | -816.3630 | 2276.9572 | 0.6690 | 2.74 | 0.0119 |
| 9 | heartrate*respiratio | | 10 | 62 | 0.1631 | 0.1472 | 2067.6631 | 2070.1878 | -1187.9770 | 63.1360 | -814.8270 | 2274.9173 | 0.6676 | 6.43 | 0.0112 |
| 10 | | ageyear*heartrate | 9 | 61 | 0.1631 | 0.1474 | 2065.8833 | 2068.3284 | -1189.8033 | 61.3522 | -822.6957 | 2272.0692 | 0.6677 | 0.22 | 0.6421 |
| 11 | facilityn*cindex_cat | | 10 | 79 | 0.1711 | 0.1508 | 2070.5483 | 2074.6276 | -1182.9005 | 66.7479 | -708.4311 | 2276.6374 | 0.6613 | 1.71 | 0.0316 |
| 12 | gender*evisit | | 11 | 87 | 0.1754 | 0.1530 | 2069.7050 | 2074.6479 | -1182.3555 | 66.4186 | -660.5634 | 2276.9496 | 0.6579 | 2.05 | 0.0369 |
| 13 | temperature*evisit | | 12 | 92 | 0.1784 | 0.1548 | 2067.6767 | 2073.2026 | -1183.3391 | 64.8089 | -632.1473 | 2278.3882 | 0.6554 | 2.34 | 0.0392 |
| 14 | heartrate*gender | | 13 | 94 | 0.1799 | 0.1558 | 2065.8882 | 2071.6567 | -1184.6290 | 63.2371 | -621.7582 | 2278.9868 | 0.6543 | 2.81 | 0.0602 |
| 15 | ageyear*cindex_cat | | 14 | 97 | 0.1816 | 0.1567 | 2065.0760 | 2071.2184 | -1184.7804 | 62.6926 | -604.3038 | 2279.0262 | 0.6529 | 2.21 | 0.0854 |
| 16 | respiration*religion | | 15 | 103 | 0.1843 | 0.1580 | 2066.0682 | 2072.9949 | -1182.5584 | 64.1463 | -566.7783 | 2279.3920 | 0.6507 | 1.78 | 0.0992 |
| 17 | religion | | 16 | 109 | 0.1897 | 0.1619 | 2056.4856 | 2064.2454 | -1190.0811 | 55.5717 | -539.8277 | 2267.8806 | 0.6464 | 3.49 | 0.0019 |
| 18 | | heartrate*respiratio | 15 | 108 | 0.1893 | 0.1618 | 2056.0550 | 2063.6725 | -1190.7261 | 55.0631 | -546.3472 | 2266.1587* | 0.6467 | 1.52 | 0.2181 |
| 19 | ageyear*temperature | | 16 | 109 | 0.1900 | 0.1622 | 2055.3833 | 2063.1431 | -1191.1059 | 54.5245 | -540.9300 | 2269.2159 | 0.6462 | 2.58 | 0.1081 |
| 20 | respirati*cindex_cat | | 17 | 112 | 0.1916 | 0.1631 | 2054.9611 | 2063.1558 | -1190.7462 | 54.4306 | -523.0856 | 2273.1656 | 0.6449 | 2.07 | 0.1022 |
| 21 | respirationra*gender | | 18 | 113 | 0.1925 | 0.1637 | 2053.4649 | 2061.8072 | -1191.8770 | 53.1180 | -518.4930 | 2274.5782 | 0.6442 | 3.38 | 0.0662 |
| 22 | temperature*gender | | 19 | 114 | 0.1931 | 0.1640 | 2053.1083 | 2061.5997* | -1191.9475* | 52.8873* | -512.7607 | 2274.3974 | 0.6438 | 2.27 | 0.1316 |
| 23 | temperatu*cindex_cat | | 20 | 117 | 0.1945 | 0.1648 | 2053.1439 | 2062.0907 | -1191.1183 | 53.2487 | -494.4584 | 2273.7409 | 0.6426 | 1.92 | 0.1244 |
| 24 | o2sat*is30dayreadmit | | 21 | 119 | 0.1955 | 0.1653 | 2053.1906 | 2062.4478 | -1190.5311 | 53.5169 | -482.2341 | 2273.7859 | 0.6418 | 1.91 | 0.1489 |
| 25 | bpsystolic*gender | | 22 | 120 | 0.1960 | 0.1656 | 2052.9743* | 2062.3888 | -1190.4544 | 53.4268 | -476.3615 | 2273.6117 | 0.6414 | 2.14 | 0.1440 |
| 26 | heartrate*religion | | 23 | 126 | 0.1985 | 0.1665* | 2055.0729 | 2065.4601 | -1186.8140 | 56.1066 | -437.7297 | 2277.2745 | 0.6394 | 1.59 | 0.1462 |
| 27 | | temperature*evisit | 22 | 122 | 0.1968 | 0.1658 | 2054.0545 | 2063.7878 | -1188.8993 | 54.6755 | -463.1035 | 2273.8605 | 0.6408 | 1.68 | 0.1518 |
| | | | | | | * Optimal \ | Value of Criter | ion | | | | <u> </u> | | | |

Stepwise selection stopped because the sequence of effect additions and removals is cycling.



The GLMSELECT Procedure Selected Model

The selected model is the model at the last step (Step 27).

Effects:

Intercept is 30 dayre*cindex_cat ageyear*cindex_cat bpsystolic*evisit o2sat*is 30 dayreadmit temperatu*cindex_cat ageyear*temperature respirati*cindex_cat gender*evisit bpsystolic*gender temperature*gender heartrate*gender respirationra*gender religion heartrate*religion respiration*religion ageyear*maritalstatu gender*maritalstatus facilityn*is 30 dayrea facilityn*cindex_cat respirati*facilityna insurance*facilityna

| Analysis of Variance | | | | | | | | | | |
|----------------------------|------|------------|---------|------|--|--|--|--|--|--|
| Source DF Squares Square I | | | | | | | | | | |
| Model | 121 | 511.43599 | 4.22674 | 6.35 | | | | | | |
| Error | 3136 | 2087.71869 | 0.66573 | | | | | | | |

| Analysis of Variance | | | | | | |
|----------------------|------|-------------------|----------------|---------|--|--|
| Source | DF | Sum of Squares | Mean Square | F Value | | |
| Corrected Total | 3257 | 2599.15468 | | | | |

| Root MSE | 0.81592 |
|----------------|-------------|
| Dependent Mean | 1.32204 |
| R-Square | 0.1968 |
| Adj R-Sq | 0.1658 |
| AIC | 2054.05454 |
| AICC | 2063.78779 |
| BIC | -1188.89929 |
| C(p) | 54.67553 |
| PRESS | 2273.86051 |
| SBC | -463.10347 |
| ASE | 0.64080 |

| Parameter Estimates | | | | | |
|-------------------------------|----|-----------|-------------------|---------|--|
| Parameter | DF | Estimate | Standard Error | t Value | |
| Intercept | 1 | -3.093720 | 3.198901 | -0.97 | |
| is30dayre*cindex_cat 0 Mild | 1 | 0.389903 | 2.276359 | 0.17 | |
| is30dayre*cindex_cat 0 Modera | 1 | -7.062103 | 3.392971 | -2.08 | |
| is30dayre*cindex_cat 0 Normal | 1 | -4.334874 | 2.397598 | -1.81 | |
| is30dayre*cindex_cat 0 severe | 1 | -1.195465 | 0.898626 | -1.33 | |
| is30dayre*cindex_cat 1 Mild | 1 | 1.927707 | 2.100616 | 0.92 | |
| is30dayre*cindex_cat 1 Modera | 1 | -6.010443 | 3.292762 | -1.83 | |
| is30dayre*cindex_cat 1 Normal | 1 | -2.995627 | 2.234918 | -1.34 | |
| is30dayre*cindex_cat 1 severe | 0 | 0 | | | |
| ageyear*cindex_cat Mild | 1 | 0.003296 | 0.002693 | 1.22 | |
| ageyear*cindex_cat Modera | 1 | 0.008960 | 0.003536 | 2.53 | |
| ageyear*cindex_cat Normal | 1 | 0.005725 | 0.002651 | 2.16 | |
| ageyear*cindex_cat severe | 0 | 0 | | | |
| bpsystolic*evisit 0 | 1 | -0.009795 | 0.001893 | -5.17 | |
| bpsystolic*evisit 1 | 1 | -0.004497 | 0.002286 | -1.97 | |
| bpsystolic*evisit 2 | 1 | -0.008968 | 0.002576 | -3.48 | |
| bpsystolic*evisit 3 | 1 | -0.002989 | 0.003041 | -0.98 | |
| bpsystolic*evisit 4 | 1 | -0.008477 | 0.001943 | -4.36 | |

| Parameter Estimates | | | | | |
|-----------------------------|----|-----------|-------------------|---------|--|
| Parameter | DF | Estimate | Standard Error | t Value | |
| o2sat*is30dayreadmit 0 | 1 | -0.002051 | 0.003031 | -0.68 | |
| o2sat*is30dayreadmit 1 | 1 | -0.016420 | 0.008562 | -1.92 | |
| temperatu*cindex_cat Mild | 1 | -0.077628 | 0.056511 | -1.37 | |
| temperatu*cindex_cat Modera | 1 | 0.116750 | 0.089227 | 1.31 | |
| temperatu*cindex_cat Normal | 1 | 0.038239 | 0.060081 | 0.64 | |
| temperatu*cindex_cat severe | 0 | 0 | | | |
| ageyear*temperature | 1 | -0.002108 | 0.001084 | -1.95 | |
| respirati*cindex_cat Mild | 1 | 0.026709 | 0.016618 | 1.61 | |
| respirati*cindex_cat Modera | 1 | 0.033364 | 0.025880 | 1.29 | |
| respirati*cindex_cat Normal | 1 | 0.042532 | 0.016230 | 2.62 | |
| respirati*cindex_cat severe | 0 | 0 | | | |
| gender*evisit Female 0 | 1 | -0.119505 | 0.306875 | -0.39 | |
| gender*evisit Female 1 | 1 | -0.774580 | 0.344713 | -2.25 | |
| gender*evisit Female 2 | 1 | -0.110451 | 0.379281 | -0.29 | |
| gender*evisit Female 3 | 1 | -0.808779 | 0.441362 | -1.83 | |
| gender*evisit Female 4 | 0 | 0 | | | |
| gender*evisit Male 0 | 1 | 0.034072 | 0.309901 | 0.11 | |
| gender*evisit Male 1 | 1 | -0.639739 | 0.349289 | -1.83 | |
| gender*evisit Male 2 | 1 | 0.069252 | 0.379856 | 0.18 | |
| gender*evisit Male 3 | 1 | -0.493232 | 0.433137 | -1.14 | |
| gender*evisit Male 4 | 0 | 0 | | | |
| bpsystolic*gender Female | 1 | 0.002681 | 0.001814 | 1.48 | |
| bpsystolic*gender Male | 0 | 0 | | | |
| temperature*gender Female | 1 | 0.218413 | 0.086949 | 2.51 | |
| temperature*gender Male | 1 | 0.141306 | 0.081032 | 1.74 | |
| heartrate*gender Female | 1 | 0.009469 | 0.005619 | 1.69 | |
| heartrate*gender Male | 1 | 0.013144 | 0.005676 | 2.32 | |
| respirationra*gender Female | 1 | -0.025177 | 0.012641 | -1.99 | |
| respirationra*gender Male | 0 | 0 | | | |
| religion Catholic | 1 | 2.677730 | 0.802421 | 3.34 | |
| religion Christian | 1 | 2.525094 | 0.829118 | 3.05 | |
| religion Hindu | 1 | 1.553000 | 1.160715 | 1.34 | |
| religion Islam | 1 | 0.780294 | 1.492664 | 0.52 | |
| religion Jewish | 1 | 2.588598 | 0.867478 | 2.98 | |
| religion No Affili | 1 | 4.032352 | 1.120315 | 3.60 | |

| Parameter Estimates | | | | | | |
|--|----|-----------|-------------------|---------|--|--|
| Parameter | DF | Estimate | Standard Error | t Value | | |
| religion Other | 0 | 0 | | | | |
| heartrate*religion Catholic | 1 | -0.002339 | 0.005800 | -0.40 | | |
| heartrate*religion Christian | 1 | -0.008802 | 0.005852 | -1.50 | | |
| heartrate*religion Hindu | 1 | 0.003380 | 0.008536 | 0.40 | | |
| heartrate*religion Islam | 1 | 0.000490 | 0.009720 | 0.05 | | |
| heartrate*religion Jewish | 1 | -0.002827 | 0.006216 | -0.45 | | |
| heartrate*religion No Affili | 1 | -0.000676 | 0.008049 | -0.08 | | |
| heartrate*religion Other | 0 | 0 | | | | |
| respiration*religion Catholic | 1 | -0.143014 | 0.043456 | -3.29 | | |
| respiration*religion Christian | 1 | -0.104622 | 0.044937 | -2.33 | | |
| respiration*religion Hindu | 1 | -0.104587 | 0.059123 | -1.77 | | |
| respiration*religion Islam | 1 | -0.057858 | 0.080043 | -0.72 | | |
| respiration*religion Jewish | 1 | -0.137744 | 0.046112 | -2.99 | | |
| respiration*religion No Affili | 1 | -0.231177 | 0.056892 | -4.06 | | |
| respiration*religion Other | 0 | 0 | | | | |
| ageyear*maritalstatu Divorce | 1 | 0.083036 | 0.039931 | 2.08 | | |
| ageyear*maritalstatu Married | 1 | 0.083024 | 0.039729 | 2.09 | | |
| ageyear*maritalstatu Separat | 1 | 0.074636 | 0.040314 | 1.85 | | |
| ageyear*maritalstatu Single | 1 | 0.085435 | 0.039774 | 2.15 | | |
| ageyear*maritalstatu Widowed | 1 | 0.068551 | 0.039760 | 1.72 | | |
| gender*maritalstatus Female Divorce | 1 | -3.707140 | 1.483151 | -2.50 | | |
| gender*maritalstatus Female Married | 1 | -3.767795 | 1.453289 | -2.59 | | |
| gender*maritalstatus Female Separat | 1 | -3.350520 | 1.532860 | -2.19 | | |
| gender*maritalstatus Female Single | 1 | -3.782840 | 1.452079 | -2.61 | | |
| gender*maritalstatus Female Widowed | 1 | -2.536035 | 1.416742 | -1.79 | | |
| gender*maritalstatus Male Divorce | 1 | -1.404493 | 0.412282 | -3.41 | | |
| gender*maritalstatus Male Married | 1 | -1.396699 | 0.313111 | -4.46 | | |
| gender*maritalstatus Male Separat | 1 | -0.549764 | 0.651429 | -0.84 | | |
| gender*maritalstatus Male Single | 1 | -1.458620 | 0.309584 | -4.71 | | |
| gender*maritalstatus Male Widowed | 0 | 0 | | | | |
| facilityn*is30dayrea LIJ Forest Hills 0 | 1 | -0.453370 | 0.160366 | -2.83 | | |
| facilityn*is30dayrea LIJ Forest Hills 1 | 0 | 0 | | | | |
| facilityn*is30dayrea LIJ Valley Stream 0 | 1 | 0.098093 | 0.188510 | 0.52 | | |
| facilityn*is30dayrea LIJ Valley Stream 1 | 0 | 0 | | | | |
| facilityn*is30dayrea Long Island Jewish Hospital 0 | 1 | -0.210553 | 0.143177 | -1.47 | | |

| Parameter Estimates | | | | | |
|---|----|-----------|-------------------|---------|--|
| Parameter | DF | Estimate | Standard Error | t Value | |
| facilityn*is30dayrea Long Island Jewish Hospital 1 | 0 | 0 | | | |
| facilityn*is30dayrea NSUH 0 | 1 | -0.273292 | 0.135603 | -2.02 | |
| facilityn*is30dayrea NSUH 1 | 0 | 0 | | | |
| facilityn*is30dayrea Other 0 | 1 | 0.055867 | 0.342971 | 0.16 | |
| facilityn*is30dayrea Other 1 | 0 | 0 | | | |
| facilityn*is30dayrea Plainview Hospital 0 | 1 | -0.266754 | 0.185270 | -1.44 | |
| facilityn*is30dayrea Plainview Hospital 1 | 0 | 0 | | | |
| facilityn*is30dayrea Southside Hospital 0 | 0 | 0 | | | |
| facilityn*is30dayrea Southside Hospital 1 | 0 | 0 | | | |
| facilityn*cindex_cat LIJ Forest Hills Mild | 1 | 0.228510 | 0.150974 | 1.51 | |
| facilityn*cindex_cat LIJ Forest Hills Modera | 1 | 0.198644 | 0.199076 | 1.00 | |
| facilityn*cindex_cat LIJ Forest Hills Normal | 1 | 0.261960 | 0.158829 | 1.65 | |
| facilityn*cindex_cat LIJ Forest Hills severe | 0 | 0 | | | |
| facilityn*cindex_cat LIJ Valley Stream Mild | 1 | 0.364677 | 0.175327 | 2.08 | |
| facilityn*cindex_cat LIJ Valley Stream Modera | 1 | 0.233937 | 0.252999 | 0.92 | |
| facilityn*cindex_cat LIJ Valley Stream Normal | 1 | 0.564291 | 0.185589 | 3.04 | |
| facilityn*cindex_cat LIJ Valley Stream severe | 0 | 0 | | | |
| facilityn*cindex_cat Long Island Jewish Hospital Mild | 1 | 0.322874 | 0.136305 | 2.37 | |
| facilityn*cindex_cat Long Island Jewish Hospital Modera | 1 | 0.334699 | 0.191035 | 1.75 | |
| facilityn*cindex_cat Long Island Jewish Hospital Normal | 1 | 0.466556 | 0.145172 | 3.21 | |
| facilityn*cindex_cat Long Island Jewish Hospital severe | 0 | 0 | | | |
| facilityn*cindex_cat NSUH Mild | 1 | 0.402305 | 0.132014 | 3.05 | |
| facilityn*cindex_cat NSUH Modera | 1 | 0.454768 | 0.183975 | 2.47 | |
| facilityn*cindex_cat NSUH Normal | 1 | 0.381452 | 0.138330 | 2.76 | |
| facilityn*cindex_cat NSUH severe | 0 | 0 | | | |
| facilityn*cindex_cat Other Mild | 1 | 0.627798 | 0.324477 | 1.93 | |
| facilityn*cindex_cat Other Modera | 1 | 0.901185 | 0.365256 | 2.47 | |
| facilityn*cindex_cat Other Normal | 1 | 0.697571 | 0.312982 | 2.23 | |
| facilityn*cindex_cat Other severe | 0 | 0 | | | |
| facilityn*cindex_cat Plainview Hospital Mild | 1 | 0.545925 | 0.167505 | 3.26 | |
| facilityn*cindex_cat Plainview Hospital Modera | 1 | 0.205042 | 0.221225 | 0.93 | |
| facilityn*cindex_cat Plainview Hospital Normal | 1 | 0.413576 | 0.179389 | 2.31 | |
| facilityn*cindex_cat Plainview Hospital severe | 0 | 0 | | | |
| facilityn*cindex_cat Southside Hospital Mild | 0 | 0 | | | |
| facilityn*cindex_cat Southside Hospital Modera | 0 | 0 | | | |

| Parameter Estimates | | | | | |
|---|----|-----------|-------------------|---------|--|
| Parameter | DF | Estimate | Standard Error | t Value | |
| facilityn*cindex_cat Southside Hospital Normal | 0 | 0 | | | |
| facilityn*cindex_cat Southside Hospital severe | 0 | 0 | | | |
| respirati*facilityna LIJ Forest Hills | 1 | 0.111233 | 0.045144 | 2.46 | |
| respirati*facilityna LIJ Valley Stream | 1 | 0.136934 | 0.046006 | 2.98 | |
| respirati*facilityna Long Island Jewish Hospital | 1 | 0.135285 | 0.044933 | 3.01 | |
| respirati*facilityna NSUH | 1 | 0.157916 | 0.046442 | 3.40 | |
| respirati*facilityna Other | 1 | 0.189662 | 0.059449 | 3.19 | |
| respirati*facilityna Plainview Hospital | 1 | 0.203333 | 0.047760 | 4.26 | |
| respirati*facilityna Southside Hospital | 1 | 0.115422 | 0.045126 | 2.56 | |
| insurance*facilityna Medicaid LIJ Forest Hills | 1 | 0.553337 | 0.460467 | 1.20 | |
| insurance*facilityna Medicaid LIJ Valley Stream | 1 | -0.681518 | 0.477160 | -1.43 | |
| insurance*facilityna Medicaid Long Island Jewish Hospital | 1 | -0.128340 | 0.424738 | -0.30 | |
| insurance*facilityna Medicaid NSUH | 1 | -0.430495 | 0.457882 | -0.94 | |
| insurance*facilityna Medicaid Other | 1 | -2.393607 | 1.204143 | -1.99 | |
| insurance*facilityna Medicaid Plainview Hospital | 1 | -2.116962 | 0.623303 | -3.40 | |
| insurance*facilityna Medicaid Southside Hospital | 1 | 0.812155 | 0.150902 | 5.38 | |
| insurance*facilityna Medicare LIJ Forest Hills | 1 | 0.515108 | 0.425753 | 1.21 | |
| insurance*facilityna Medicare LIJ Valley Stream | 1 | -0.591456 | 0.449682 | -1.32 | |
| insurance*facilityna Medicare Long Island Jewish Hospital | 1 | -0.363908 | 0.410086 | -0.89 | |
| insurance*facilityna Medicare NSUH | 1 | -0.500487 | 0.424121 | -1.18 | |
| insurance*facilityna Medicare Other | 1 | -1.745614 | 0.893655 | -1.95 | |
| insurance*facilityna Medicare Plainview Hospital | 1 | -1.376321 | 0.484130 | -2.84 | |
| insurance*facilityna Medicare Southside Hospital | 1 | 0.296822 | 0.080593 | 3.68 | |
| insurance*facilityna Private LIJ Forest Hills | 1 | 0.420842 | 0.427399 | 0.98 | |
| insurance*facilityna Private LIJ Valley Stream | 1 | -0.557684 | 0.449709 | -1.24 | |
| insurance*facilityna Private Long Island Jewish Hospital | 1 | -0.301644 | 0.412625 | -0.73 | |
| insurance*facilityna Private NSUH | 1 | -0.659208 | 0.423675 | -1.56 | |
| insurance*facilityna Private Other | 1 | -1.951402 | 0.882066 | -2.21 | |
| insurance*facilityna Private Plainview Hospital | 1 | -1.438376 | 0.480530 | -2.99 | |
| insurance*facilityna Private Southside Hospital | 0 | 0 | | | |