

### The CONTENTS Procedure

<b>Data Set Name</b>	WORK.BMISAT	<b>Observations</b>	2709
<b>Member Type</b>	DATA	<b>Variables</b>	22
<b>Engine</b>	V9	<b>Indexes</b>	0
<b>Created</b>	12/12/2017 13:28:13	<b>Observation Length</b>	176
<b>Last Modified</b>	12/12/2017 13:28:13	<b>Deleted Observations</b>	0
<b>Protection</b>		<b>Compressed</b>	NO
<b>Data Set Type</b>		<b>Sorted</b>	NO
<b>Label</b>			
<b>Data Representation</b>	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
<b>Encoding</b>	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information	
<b>Data Set Page Size</b>	131072
<b>Number of Data Set Pages</b>	4
<b>First Data Page</b>	1
<b>Max Obs per Page</b>	743
<b>Obs in First Data Page</b>	717
<b>Number of Data Set Repairs</b>	0
<b>Filename</b>	/saswork/SAS_work0512000187F8_odaws04-prod-us/SAS_work2439000187F8_odaws04-prod-us/bmisat.sas7bdat
<b>Release Created</b>	9.0401M4
<b>Host Created</b>	Linux
<b>Inode Number</b>	58982417
<b>Access Permission</b>	rw-r--r--
<b>Owner Name</b>	km33040
<b>File Size</b>	640KB
<b>File Size (bytes)</b>	655360

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
9	ageyear	Num	8	BEST12.	BEST32.
14	bmi	Num	8	BEST12.	BEST32.
20	bpdiastric	Num	8	BEST12.	BEST32.
15	bpsystolic	Num	8	BEST12.	BEST32.
6	cindex	Num	8	BEST12.	BEST32.
7	evisit	Num	8	BEST12.	BEST32.
10	gender	Num	8	BEST12.	BEST32.
18	heartrate	Num	8	BEST12.	BEST32.
8	icu_flag	Num	8	BEST12.	BEST32.

### The CONTENTS Procedure

Alphabetic List of Variables and Attributes					
#	Variable	Type	Len	Format	Informat
22	id	Num	8	BEST12.	BEST32.
13	insurancetype	Num	8	BEST12.	BEST32.
3	is30dayreadmit	Num	8	BEST12.	BEST32.
2	losdays2	Num	8	BEST12.	BEST32.
21	losdays2_log	Num	8	BEST12.	BEST32.
1	loshours	Num	8	BEST12.	BEST32.
12	maritalstatus	Num	8	BEST12.	BEST32.
5	mews	Num	8	BEST12.	BEST32.
4	month	Num	8	BEST12.	BEST32.
16	o2sat	Num	8	BEST12.	BEST32.
11	religion	Num	8	BEST12.	BEST32.
19	respirationrate	Num	8	BEST12.	BEST32.
17	temperature	Num	8	BEST12.	BEST32.

### The GLMSELECT Procedure

Data Set	WORK.BMISAT
Dependent Variable	losdays2_log
Selection Method	Forward
Select Criterion	Significance Level
Stop Criterion	Significance Level
Entry Significance Level (SLE)	0.15
Effect Hierarchy Enforced	None

Number of Observations Read	2709
Number of Observations Used	2709

Class Level Information		
Class	Levels	Values
is30dayreadmit	2	0 1
month	11	1 2 3 4 5 6 8 9 10 11 12
mews	4	1 2 3 4
cindex	3	0 1 2
evisit	5	0 1 2 3 4
icu_flag	2	0 1
gender	2	0 1
religion	2	0 1
maritalstatus	2	0 1
insurancetype	3	1 2 3

Dimensions	
Number of Effects	19
Number of Parameters	45

### The GLMSELECT Procedure

Forward Selection Summary					
Step	Effect Entered	Number Effects In	Number Params In	F Value	Pr > F
0	Intercept	1	1	0.00	1.0000
1	ageyear	2	2	130.28	<.0001
2	evisit	3	6	21.89	<.0001
3	bpsystolic	4	7	44.00	<.0001
4	cindex	5	9	19.41	<.0001
5	heartrate	6	10	24.16	<.0001
6	is30dayreadmit	7	11	15.20	<.0001
7	respirationrate	8	12	12.42	0.0004
8	insurancetype	9	14	7.28	0.0007
9	maritalstatus	10	15	4.39	0.0363
10	bpdiaastolic	11	16	3.65	0.0562
11	gender	12	17	3.52	0.0607
12	month	13	27	1.75	0.0637
13	religion	14	28	3.25	0.0716
14	o2sat	15	29	2.87	0.0905

Selection stopped as the candidate for entry has SLE > 0.15.

Stop Details					
Candidate For	Effect	Candidate Significance		Compare Significance	
Entry	bmi	0.2403	>	0.1500	(SLE)

## The GLMSELECT Procedure Selected Model

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

<b>Effects:</b>	Intercept is30dayreadmit month cindex evisit ageyear gender religion maritalstatus insurancetype bpsystolic o2sat heartrate respirationrate bpdiaastolic
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Analysis of Variance				
Source	DF	Sum of Squares	Mean Square	F Value
Model	28	291.89094	10.42468	15.15
Error	2680	1844.51498	0.68825	
Corrected Total	2708	2136.40592		

Root MSE	0.82961
Dependent Mean	1.31546
R-Square	0.1366
Adj R-Sq	0.1276
AIC	1727.76008
AICC	1728.45463
SBC	-812.01421

Parameter Estimates				
Parameter	DF	Estimate	Standard Error	t Value
Intercept	1	1.359728	0.478583	2.84
is30dayreadmit 0	1	-0.174406	0.048362	-3.61
is30dayreadmit 1	0	0	.	.
month 1	1	0.569440	0.298300	1.91
month 2	1	0.593113	0.297492	1.99
month 3	1	0.481977	0.298022	1.62
month 4	1	0.597579	0.297467	2.01
month 5	1	0.591271	0.299906	1.97
month 6	1	0.548818	0.296205	1.85
month 8	1	0.680438	0.320425	2.12
month 9	1	0.694878	0.298094	2.33
month 10	1	0.399870	0.474722	0.84
month 11	1	0.486201	0.307918	1.58
month 12	0	0	.	.
cindex 0	1	-0.235764	0.046148	-5.11
cindex 1	1	-0.147229	0.048042	-3.06
cindex 2	0	0	.	.

**The GLMSELECT Procedure**  
**Selected Model**

Parameter Estimates				
Parameter	DF	Estimate	Standard Error	t Value
evisit 0	1	-0.246851	0.045494	-5.43
evisit 1	1	-0.225105	0.049106	-4.58
evisit 2	1	-0.155707	0.053884	-2.89
evisit 3	1	0.041746	0.063062	0.66
evisit 4	0	0	.	.
ageyear	1	0.009234	0.001097	8.42
gender 0	1	-0.066095	0.033345	-1.98
gender 1	0	0	.	.
religion 0	1	-0.135208	0.073561	-1.84
religion 1	0	0	.	.
maritalstatus 0	1	0.079679	0.033106	2.41
maritalstatus 1	0	0	.	.
insurancetype 1	1	-0.235374	0.076207	-3.09
insurancetype 2	1	-0.166595	0.080674	-2.07
insurancetype 3	0	0	.	.
bpsystolic	1	-0.004368	0.001181	-3.70
o2sat	1	-0.005120	0.003024	-1.69
heartrate	1	0.006118	0.001264	4.84
respirationrate	1	0.019184	0.005870	3.27
bpdiastolic	1	-0.004586	0.001997	-2.30

### The GLMSELECT Procedure

<b>Data Set</b>	WORK.BMISAT
<b>Dependent Variable</b>	losdays2_log
<b>Selection Method</b>	Backward
<b>Select Criterion</b>	Significance Level
<b>Stop Criterion</b>	Significance Level
<b>Stay Significance Level (SLS)</b>	0.15
<b>Effect Hierarchy Enforced</b>	None

<b>Number of Observations Read</b>	2709
<b>Number of Observations Used</b>	2709

Class Level Information		
Class	Levels	Values
is30dayreadmit	2	0 1
month	11	1 2 3 4 5 6 8 9 10 11 12
mews	4	1 2 3 4
cindex	3	0 1 2
evisit	5	0 1 2 3 4
icu_flag	2	0 1
gender	2	0 1
religion	2	0 1
maritalstatus	2	0 1
insurancetype	3	1 2 3

Dimensions	
<b>Number of Effects</b>	19
<b>Number of Parameters</b>	45

### The GLMSELECT Procedure

Backward Selection Summary					
Step	Effect Removed	Number Effects In	NumberParms In	F Value	Pr > F
0		19	35		
1	mews	18	32	0.46	0.7127
2	icu_flag	17	31	0.61	0.4355
3	temperature	16	30	0.81	0.3682
4	bmi	15	29	1.38	0.2403

Selection stopped because the next candidate for removal has SLS < 0.15.

Stop Details					
Candidate For	Effect	Candidate Significance		Compare Significance	
Removal	o2sat	0.0905	<	0.1500	(SLS)



## The GLMSELECT Procedure Selected Model

**The selected model is the model at the last step (Step 4).**

<b>Effects:</b>	Intercept is30dayreadmit month cindex evisit ageyear gender religion maritalstatus insurancetype bpsystolic o2sat heartrate respirationrate bpdiaastolic
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Analysis of Variance				
Source	DF	Sum of Squares	Mean Square	F Value
Model	28	291.89094	10.42468	15.15
Error	2680	1844.51498	0.68825	
Corrected Total	2708	2136.40592		

Root MSE	0.82961
Dependent Mean	1.31546
R-Square	0.1366
Adj R-Sq	0.1276
AIC	1727.76008
AICC	1728.45463
SBC	-812.01421

Parameter Estimates				
Parameter	DF	Estimate	Standard Error	t Value
Intercept	1	1.359728	0.478583	2.84
is30dayreadmit 0	1	-0.174406	0.048362	-3.61
is30dayreadmit 1	0	0	.	.
month 1	1	0.569440	0.298300	1.91
month 2	1	0.593113	0.297492	1.99
month 3	1	0.481977	0.298022	1.62
month 4	1	0.597579	0.297467	2.01
month 5	1	0.591271	0.299906	1.97
month 6	1	0.548818	0.296205	1.85
month 8	1	0.680438	0.320425	2.12
month 9	1	0.694878	0.298094	2.33
month 10	1	0.399870	0.474722	0.84
month 11	1	0.486201	0.307918	1.58
month 12	0	0	.	.
cindex 0	1	-0.235764	0.046148	-5.11
cindex 1	1	-0.147229	0.048042	-3.06
cindex 2	0	0	.	.

**The GLMSELECT Procedure**  
**Selected Model**

Parameter Estimates				
Parameter	DF	Estimate	Standard Error	t Value
evisit 0	1	-0.246851	0.045494	-5.43
evisit 1	1	-0.225105	0.049106	-4.58
evisit 2	1	-0.155707	0.053884	-2.89
evisit 3	1	0.041746	0.063062	0.66
evisit 4	0	0	.	.
ageyear	1	0.009234	0.001097	8.42
gender 0	1	-0.066095	0.033345	-1.98
gender 1	0	0	.	.
religion 0	1	-0.135208	0.073561	-1.84
religion 1	0	0	.	.
maritalstatus 0	1	0.079679	0.033106	2.41
maritalstatus 1	0	0	.	.
insurancetype 1	1	-0.235374	0.076207	-3.09
insurancetype 2	1	-0.166595	0.080674	-2.07
insurancetype 3	0	0	.	.
bpsystolic	1	-0.004368	0.001181	-3.70
o2sat	1	-0.005120	0.003024	-1.69
heartrate	1	0.006118	0.001264	4.84
respirationrate	1	0.019184	0.005870	3.27
bpdiastolic	1	-0.004586	0.001997	-2.30

### The GLMSELECT Procedure

<b>Data Set</b>	WORK.BMISAT
<b>Dependent Variable</b>	losdays2_log
<b>Selection Method</b>	Stepwise
<b>Select Criterion</b>	Significance Level
<b>Stop Criterion</b>	Significance Level
<b>Entry Significance Level (SLE)</b>	0.15
<b>Stay Significance Level (SLS)</b>	0.15
<b>Effect Hierarchy Enforced</b>	None

<b>Number of Observations Read</b>	2709
<b>Number of Observations Used</b>	2709

Class Level Information		
Class	Levels	Values
is30dayreadmit	2	0 1
month	11	1 2 3 4 5 6 8 9 10 11 12
mews	4	1 2 3 4
cindex	3	0 1 2
evisit	5	0 1 2 3 4
icu_flag	2	0 1
gender	2	0 1
religion	2	0 1
maritalstatus	2	0 1
insurancetype	3	1 2 3

Dimensions	
<b>Number of Effects</b>	19
<b>Number of Parameters</b>	45

### The GLMSELECT Procedure

Stepwise Selection Summary						
Step	Effect Entered	Effect Removed	Number Effects In	NumberParms In	F Value	Pr > F
0	Intercept		1	1	0.00	1.0000
1	ageyear		2	2	130.28	<.0001
2	evisit		3	6	21.89	<.0001
3	bpsystolic		4	7	44.00	<.0001
4	cindex		5	9	19.41	<.0001
5	heartrate		6	10	24.16	<.0001
6	is30dayreadmit		7	11	15.20	<.0001
7	respirationrate		8	12	12.42	0.0004
8	insurancetype		9	14	7.28	0.0007
9	maritalstatus		10	15	4.39	0.0363
10	bpdiaastolic		11	16	3.65	0.0562
11	gender		12	17	3.52	0.0607
12	month		13	27	1.75	0.0637
13	religion		14	28	3.25	0.0716
14	o2sat		15	29	2.87	0.0905

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	
Entry	bmi	0.2403	>	0.1500	(SLE)
Removal	o2sat	0.0905	<	0.1500	(SLS)

## The GLMSELECT Procedure Selected Model

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

<b>Effects:</b>	Intercept is30dayreadmit month cindex evisit ageyear gender religion maritalstatus insurancetype bpsystolic o2sat heartrate respirationrate bpdiaastolic
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Analysis of Variance				
Source	DF	Sum of Squares	Mean Square	F Value
Model	28	291.89094	10.42468	15.15
Error	2680	1844.51498	0.68825	
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cindex 1	1	-0.147229	0.048042	-3.06
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**The GLMSELECT Procedure**  
**Selected Model**

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evisit 4	0	0	.	.
ageyear	1	0.009234	0.001097	8.42
gender 0	1	-0.066095	0.033345	-1.98
gender 1	0	0	.	.
religion 0	1	-0.135208	0.073561	-1.84
religion 1	0	0	.	.
maritalstatus 0	1	0.079679	0.033106	2.41
maritalstatus 1	0	0	.	.
insurancetype 1	1	-0.235374	0.076207	-3.09
insurancetype 2	1	-0.166595	0.080674	-2.07
insurancetype 3	0	0	.	.
bpsystolic	1	-0.004368	0.001181	-3.70
o2sat	1	-0.005120	0.003024	-1.69
heartrate	1	0.006118	0.001264	4.84
respirationrate	1	0.019184	0.005870	3.27
bpdiastolic	1	-0.004586	0.001997	-2.30