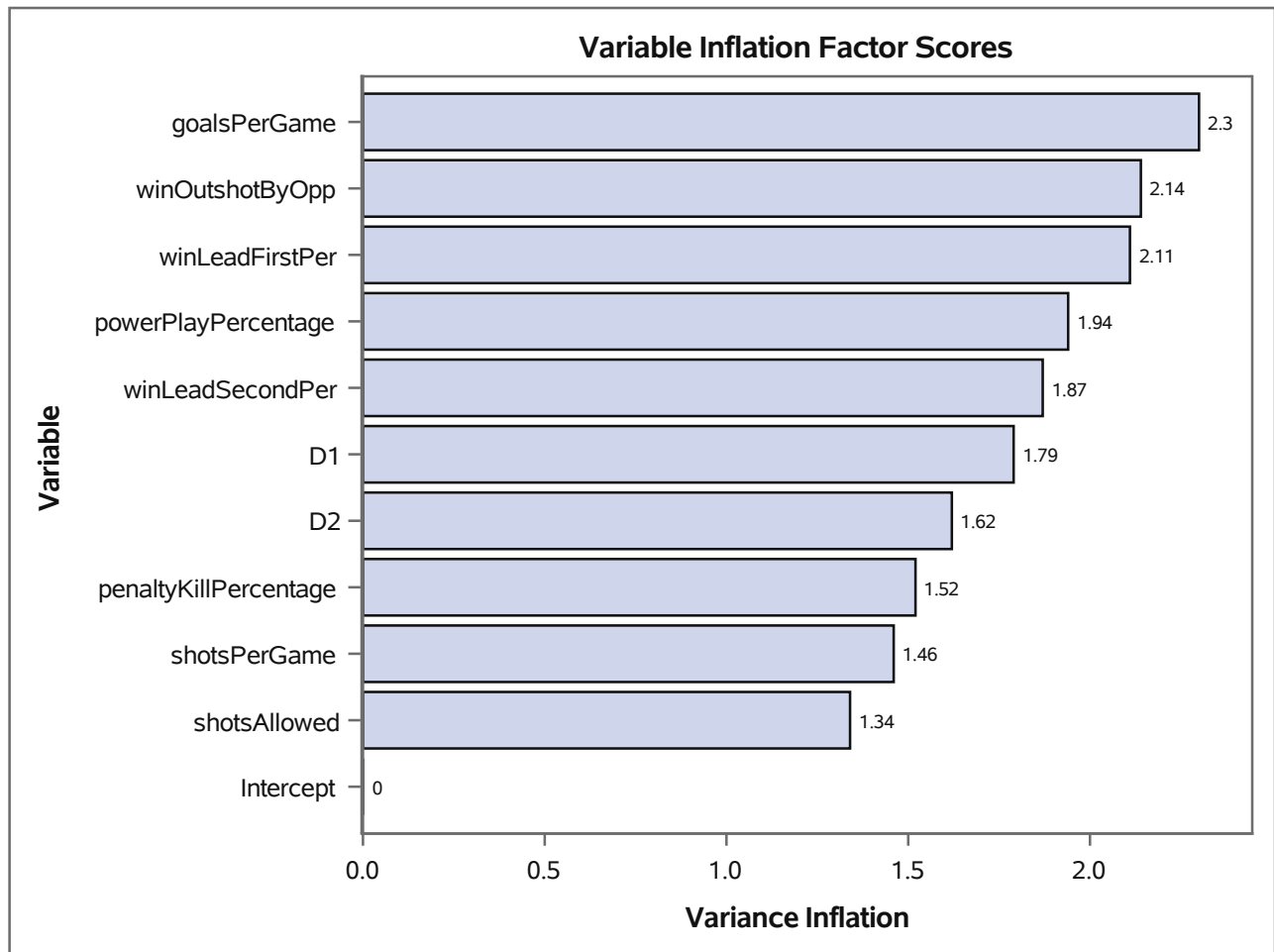


Obs	Variable	Estimate	Probt	VarianceInflation
1	goalsPerGame	-0.23425	<.0001	2.30
2	winOutshotByOpp	-0.61379	0.0001	2.14
3	winLeadFirstPer	-0.03732	0.8273	2.11
4	powerPlayPercentage	0.00065485	0.9067	1.94
5	winLeadSecondPer	-0.01328	0.9517	1.87
6	D1	-0.19215	<.0001	1.79
7	D2	0.34383	<.0001	1.62
8	penaltyKillPercentage	-0.02087	<.0001	1.52
9	shotsPerGame	-0.00042878	0.9533	1.46
10	shotsAllowed	0.03337	<.0001	1.34
11	Intercept	2.13577	0.0002	0.00



The LOGISTIC Procedure

Model Information	
Data Set	WORK.TRAIN
Response Variable	failed_playoff_flag
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	604
Number of Observations Used	604

Response Profile		
Ordered Value	failed_playoff_flag	Total Frequency
1	1	249
2	0	355

Probability modeled is failed_playoff_flag='1'.

Stepwise Selection Procedure

Step 0. Intercept entered:

Model Convergence Status	
Convergence criterion (GCONV=1E-8) satisfied.	

-2 Log L = 818.622

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-0.3547	0.0827	18.4089	<.0001

Residual Chi-Square Test		
Chi-Square	DF	Pr > ChiSq
346.8977	10	<.0001

Analysis of Effects Eligible for Entry			
Effect	DF	Score Chi-Square	Pr > ChiSq
goalsPerGame	1	114.0830	<.0001
powerPlayPercentage	1	70.1260	<.0001
penaltyKillPercentag	1	53.4724	<.0001
shotsPerGame	1	57.9319	<.0001
shotsAllowed	1	72.8057	<.0001
winLeadFirstPer	1	121.6612	<.0001
winLeadSecondPer	1	93.0080	<.0001
winOutshotByOpp	1	152.0170	<.0001
D1	1	180.2221	<.0001
D2	1	223.5101	<.0001

Step 1. Effect D2 entered:

The LOGISTIC Procedure

Model Convergence Status	
Convergence criterion (GCONV=1E-8) satisfied.	

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	820.622	569.144
SC	825.026	577.951
-2 Log L	818.622	565.144

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	253.4784	1	<.0001
Score	223.5101	1	<.0001
Wald	77.9603	1	<.0001

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-1.0901	0.1064	104.9422	<.0001
D2	1	4.5789	0.5186	77.9603	<.0001

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
D2	97.410	35.251	269.174

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	52.0	Somers' D	0.515
Percent Discordant	0.5	Gamma	0.980
Percent Tied	47.4	Tau-a	0.250
Pairs	88395	c	0.757

Residual Chi-Square Test		
Chi-Square	DF	Pr > ChiSq
175.2993	9	<.0001

Analysis of Effects Eligible for Removal			
Effect	DF	Wald Chi-Square	Pr > ChiSq
D2	1	77.9603	<.0001

Note No effects for the model in Step 1 are removed.

The LOGISTIC Procedure

Analysis of Effects Eligible for Entry			
Effect	DF	Score Chi-Square	Pr > ChiSq
goalsPerGame	1	20.9520	<.0001
powerPlayPercentage	1	13.8453	0.0002
penaltyKillPercentag	1	40.7598	<.0001
shotsPerGame	1	14.0816	0.0002
shotsAllowed	1	48.3636	<.0001
winLeadFirstPer	1	54.4660	<.0001
winLeadSecondPer	1	36.6880	<.0001
winOutshotByOpp	1	80.8905	<.0001
D1	1	78.4729	<.0001

Step 2. Effect winOutshotByOpp entered:

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	820.622	483.888
SC	825.026	497.099
-2 Log L	818.622	477.888

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	340.7342	2	<.0001
Score	277.3228	2	<.0001
Wald	125.9746	2	<.0001

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	3.1714	0.5076	39.0268	<.0001
winOutshotByOpp	1	-9.4778	1.1527	67.6095	<.0001
D2	1	4.2047	0.5282	63.3724	<.0001

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
winOutshotByOpp	<0.001	<0.001	<0.001
D2	67.001	23.795	188.655

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	88.2	Somers' D	0.767
Percent Discordant	11.5	Gamma	0.769
Percent Tied	0.2	Tau-a	0.372
Pairs	88395	c	0.883

Residual Chi-Square Test		
Chi-Square	DF	Pr > ChiSq
115.4659	8	<.0001

Analysis of Effects Eligible for Removal			
Effect	DF	Wald Chi-Square	Pr > ChiSq
winOutshotByOpp	1	67.6095	<.0001
D2	1	63.3724	<.0001

Note No effects for the model in Step 2 are removed.

Analysis of Effects Eligible for Entry			
Effect	DF	Score Chi-Square	Pr > ChiSq
goalsPerGame	1	27.2089	<.0001
powerPlayPercentage	1	6.1537	0.0131
penaltyKillPercentag	1	16.3488	<.0001
shotsPerGame	1	4.4692	0.0345
shotsAllowed	1	42.4663	<.0001
winLeadFirstPer	1	12.9751	0.0003
winLeadSecondPer	1	5.9490	0.0147
D1	1	22.7226	<.0001

Step 3. Effect shotsAllowed entered:

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	820.622	440.754
SC	825.026	458.368
-2 Log L	818.622	432.754

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	385.8686	3	<.0001
Score	303.3249	3	<.0001
Wald	138.4982	3	<.0001

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-5.6845	1.4919	14.5189	0.0001
shotsAllowed	1	0.3021	0.0489	38.1429	<.0001
winOutshotByOpp	1	-9.8359	1.2441	62.5040	<.0001
D2	1	4.1424	0.5369	59.5179	<.0001

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
shotsAllowed	1.353	1.229	1.489
winOutshotByOpp	<0.001	<0.001	<0.001
D2	62.951	21.977	180.322

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	90.7	Somers' D	0.814
Percent Discordant	9.3	Gamma	0.814
Percent Tied	0.0	Tau-a	0.395
Pairs	88395	c	0.907

Residual Chi-Square Test		
Chi-Square	DF	Pr > ChiSq
81.2394	7	<.0001

Analysis of Effects Eligible for Removal			
Effect	DF	Wald Chi-Square	Pr > ChiSq
shotsAllowed	1	38.1429	<.0001
winOutshotByOpp	1	62.5040	<.0001
D2	1	59.5179	<.0001

Note No effects for the model in Step 3 are removed.

Analysis of Effects Eligible for Entry			
Effect	DF	Score Chi-Square	Pr > ChiSq
goalsPerGame	1	47.2197	<.0001
powerPlayPercentage	1	15.1852	<.0001
penaltyKillPercentag	1	1.7469	0.1863
shotsPerGame	1	7.8936	0.0050
winLeadFirstPer	1	6.7221	0.0095
winLeadSecondPer	1	3.4910	0.0617
D1	1	18.0608	<.0001

Step 4. Effect goalsPerGame entered:

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

The LOGISTIC Procedure

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	820.622	386.521
SC	825.026	408.539
-2 Log L	818.622	376.521

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	442.1015	4	<.0001
Score	324.7384	4	<.0001
Wald	139.1827	4	<.0001

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-1.9065	1.7140	1.2373	0.2660
goalsPerGame	1	-2.2356	0.3441	42.2232	<.0001
shotsAllowed	1	0.4309	0.0593	52.8755	<.0001
winOutshotByOpp	1	-11.7208	1.4509	65.2545	<.0001
D2	1	3.1960	0.5596	32.6185	<.0001

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
goalsPerGame	0.107	0.054	0.210
shotsAllowed	1.539	1.370	1.728
winOutshotByOpp	<0.001	<0.001	<0.001
D2	24.434	8.160	73.167

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	93.4	Somers' D	0.868
Percent Discordant	6.6	Gamma	0.868
Percent Tied	0.0	Tau-a	0.421
Pairs	88395	c	0.934

Residual Chi-Square Test		
Chi-Square	DF	Pr > ChiSq
42.7229	6	<.0001

Analysis of Effects Eligible for Removal			
Effect	DF	Wald Chi-Square	Pr > ChiSq
goalsPerGame	1	42.2232	<.0001
shotsAllowed	1	52.8755	<.0001
winOutshotByOpp	1	65.2545	<.0001
D2	1	32.6185	<.0001

The LOGISTIC Procedure

Note No effects for the model in Step 4 are removed.

Analysis of Effects Eligible for Entry			
Effect	DF	Score Chi-Square	Pr > ChiSq
powerPlayPercentage	1	0.5234	0.4694
penaltyKillPercentag	1	25.6955	<.0001
shotsPerGame	1	0.0335	0.8548
winLeadFirstPer	1	1.9660	0.1609
winLeadSecondPer	1	0.7350	0.3913
D1	1	18.6784	<.0001

Step 5. Effect penaltyKillPercentag entered:

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	820.622	361.808
SC	825.026	388.230
-2 Log L	818.622	349.808

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	468.8144	5	<.0001
Score	334.1484	5	<.0001
Wald	135.5489	5	<.0001

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	24.5634	5.6813	18.6934	<.0001
goalsPerGame	1	-3.1664	0.4286	54.5814	<.0001
penaltyKillPercentag	1	-0.2678	0.0548	23.8654	<.0001
shotsAllowed	1	0.3577	0.0630	32.2719	<.0001
winOutshotByOpp	1	-11.0250	1.5139	53.0342	<.0001
D2	1	2.8937	0.5698	25.7880	<.0001

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
goalsPerGame	0.042	0.018	0.098
penaltyKillPercentag	0.765	0.687	0.852
shotsAllowed	1.430	1.264	1.618
winOutshotByOpp	<0.001	<0.001	<0.001
D2	18.060	5.911	55.177

The LOGISTIC Procedure

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	94.4	Somers' D	0.887
Percent Discordant	5.6	Gamma	0.887
Percent Tied	0.0	Tau-a	0.431
Pairs	88395	c	0.944

Residual Chi-Square Test		
Chi-Square	DF	Pr > ChiSq
17.8356	5	0.0032

Analysis of Effects Eligible for Removal			
Effect	DF	Wald Chi-Square	Pr > ChiSq
goalsPerGame	1	54.5814	<.0001
penaltyKillPercentag	1	23.8654	<.0001
shotsAllowed	1	32.2719	<.0001
winOutshotByOpp	1	53.0342	<.0001
D2	1	25.7880	<.0001

Note No effects for the model in Step 5 are removed.

Analysis of Effects Eligible for Entry			
Effect	DF	Score Chi-Square	Pr > ChiSq
powerPlayPercentage	1	0.0391	0.8432
shotsPerGame	1	0.2187	0.6400
winLeadFirstPer	1	2.5552	0.1099
winLeadSecondPer	1	0.5016	0.4788
D1	1	17.0213	<.0001

Step 6. Effect D1 entered:

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	820.622	346.627
SC	825.026	377.452
-2 Log L	818.622	332.627

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	485.9950	6	<.0001
Score	346.8562	6	<.0001
Wald	137.5075	6	<.0001

The LOGISTIC Procedure

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	23.9435	5.8718	16.6277	<.0001
goalsPerGame	1	-3.2723	0.4468	53.6360	<.0001
penaltyKillPercentag	1	-0.2688	0.0568	22.3759	<.0001
shotsAllowed	1	0.3649	0.0650	31.4939	<.0001
winOutshotByOpp	1	-8.1793	1.6081	25.8699	<.0001
D1	1	-1.4416	0.3608	15.9594	<.0001
D2	1	2.3902	0.5761	17.2153	<.0001

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
goalsPerGame	0.038	0.016	0.091
penaltyKillPercentag	0.764	0.684	0.854
shotsAllowed	1.440	1.268	1.636
winOutshotByOpp	<0.001	<0.001	0.007
D1	0.237	0.117	0.480
D2	10.915	3.529	33.759

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	95.1	Somers' D	0.902
Percent Discordant	4.9	Gamma	0.902
Percent Tied	0.0	Tau-a	0.438
Pairs	88395	c	0.951

Residual Chi-Square Test		
Chi-Square	DF	Pr > ChiSq
0.8483	4	0.9319

Analysis of Effects Eligible for Removal			
Effect	DF	Wald Chi-Square	Pr > ChiSq
goalsPerGame	1	53.6360	<.0001
penaltyKillPercentag	1	22.3759	<.0001
shotsAllowed	1	31.4939	<.0001
winOutshotByOpp	1	25.8699	<.0001
D1	1	15.9594	<.0001
D2	1	17.2153	<.0001

Note No effects for the model in Step 6 are removed.

The LOGISTIC Procedure

Analysis of Effects Eligible for Entry			
Effect	DF	Score Chi-Square	Pr > ChiSq
powerPlayPercentage	1	0.3624	0.5472
shotsPerGame	1	0.1293	0.7191
winLeadFirstPer	1	0.2765	0.5990
winLeadSecondPer	1	0.0315	0.8592

Note No (additional) effects met the 0.05 significance level for entry into the model.

Summary of Stepwise Selection							
Step	Effect		DF	Number In	Score Chi-Square	Wald Chi-Square	Pr > ChiSq
	Entered	Removed					
1	D2		1	1	223.5101		<.0001
2	winOutshotByOpp		1	2	80.8905		<.0001
3	shotsAllowed		1	3	42.4663		<.0001
4	goalsPerGame		1	4	47.2197		<.0001
5	penaltyKillPercentag		1	5	25.6955		<.0001
6	D1		1	6	17.0213		<.0001

Partition for the Hosmer and Lemeshow Test					
Group	Total	failed_playoff_flag = 1		failed_playoff_flag = 0	
		Observed	Expected	Observed	Expected
1	60	0	0.15	60	59.85
2	60	0	0.70	60	59.30
3	60	2	2.26	58	57.74
4	60	4	5.13	56	54.87
5	60	12	10.66	48	49.34
6	60	24	19.65	36	40.35
7	60	34	35.73	26	24.27
8	60	50	52.45	10	7.55
9	60	59	58.51	1	1.49
10	64	64	63.77	0	0.23

Hosmer and Lemeshow Goodness-of-Fit Test		
Chi-Square	DF	Pr > ChiSq
4.3036	8	0.8287

The FREQ Procedure

Frequency

Table of _FROM_ by _INTO_			
FROM(Formatted Value of the Observed Response)	_INTO_(Formatted Value of the Predicted Response)		
	0	1	Total
0	323	32	355
1	48	201	249
Total	371	233	604

Variable Inflation Factor Scores

Tuesday, January 26, 2021 09:03:22 PM 14

Obs	Model	Accuracy	Precision	Recall	F1
1	performance	0.86755	0.86266	0.80723	0.83402

Obs	Group	CountOfRows	CountOftarget	ModelPerc	RandomPerc	ModelCummPerc	RandomCummPerc	KS
1	0	0	0	0.0000	0	0.000	0	0.0000
2	1	60	60	24.0964	10	24.096	10	14.0964
3	2	60	59	23.6948	10	47.791	20	27.7912
4	3	60	52	20.8835	10	68.675	30	38.6747
5	4	60	33	13.2530	10	81.928	40	41.9277
6	5	60	26	10.4418	10	92.369	50	42.3695
7	6	60	12	4.8193	10	97.189	60	37.1888
8	7	60	5	2.0080	10	99.197	70	29.1968
9	8	60	2	0.8032	10	100.000	80	20.0000
10	9	60	0	0.0000	10	100.000	90	10.0000
11	10	64	0	0.0000	10	100.000	100	0.0000

