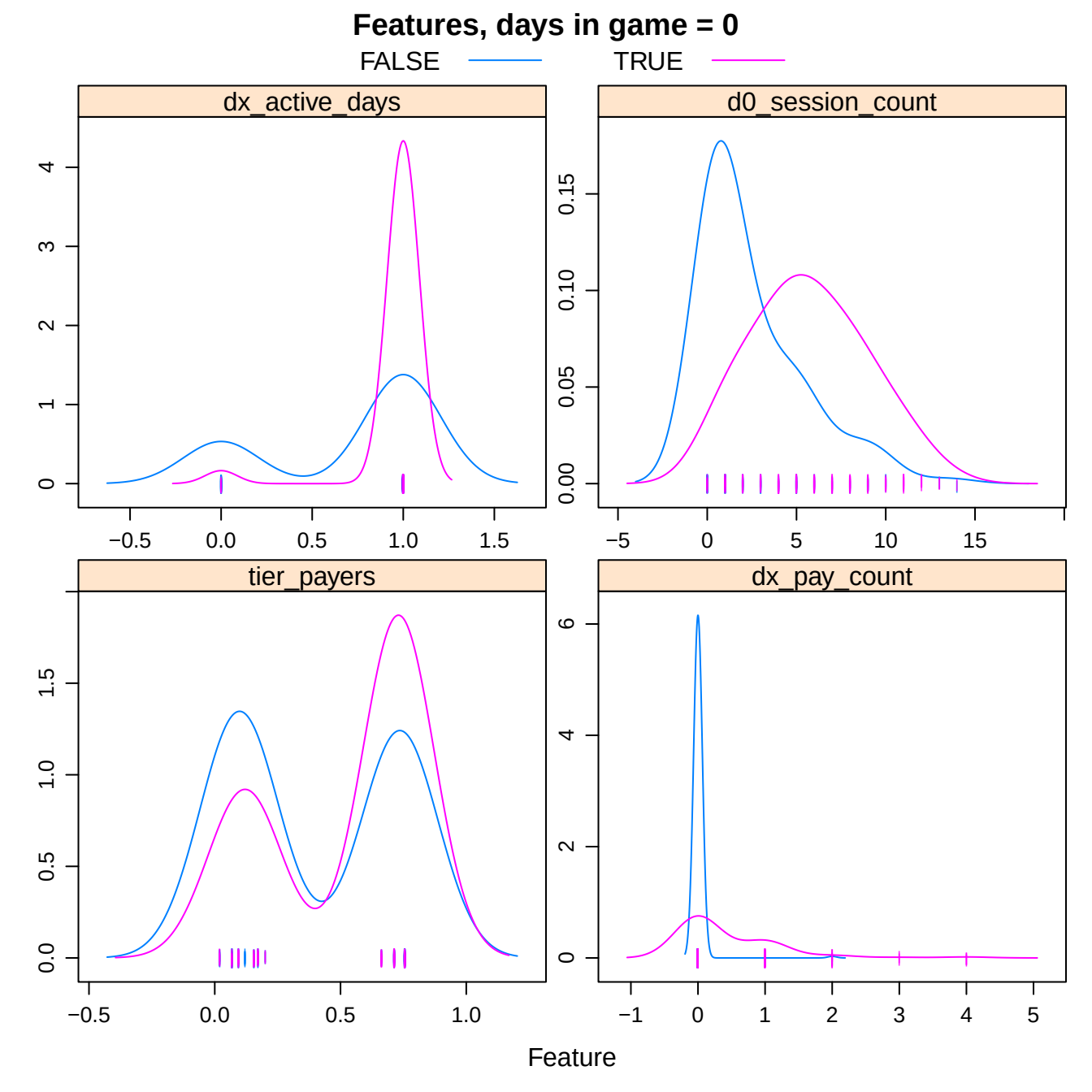
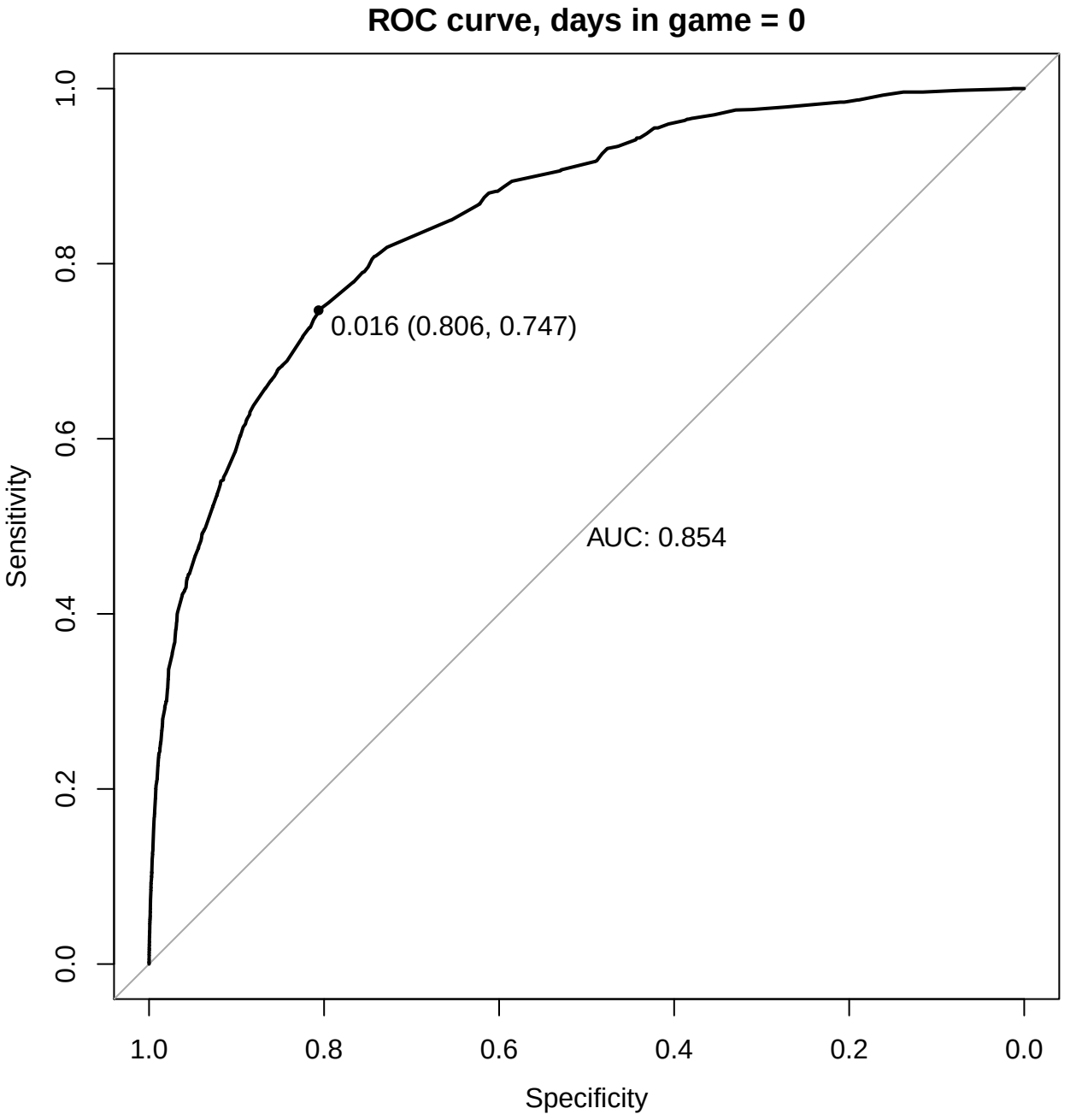
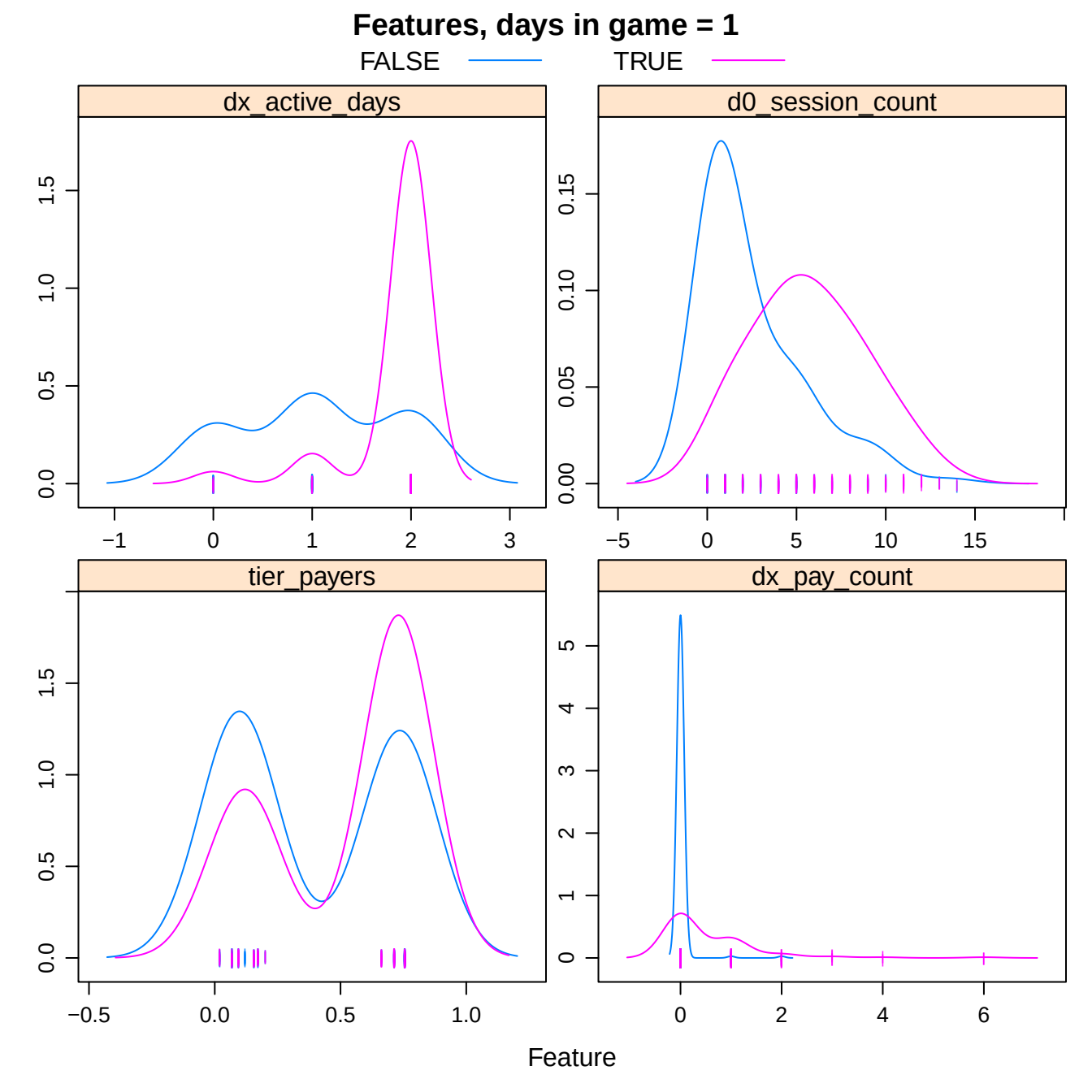
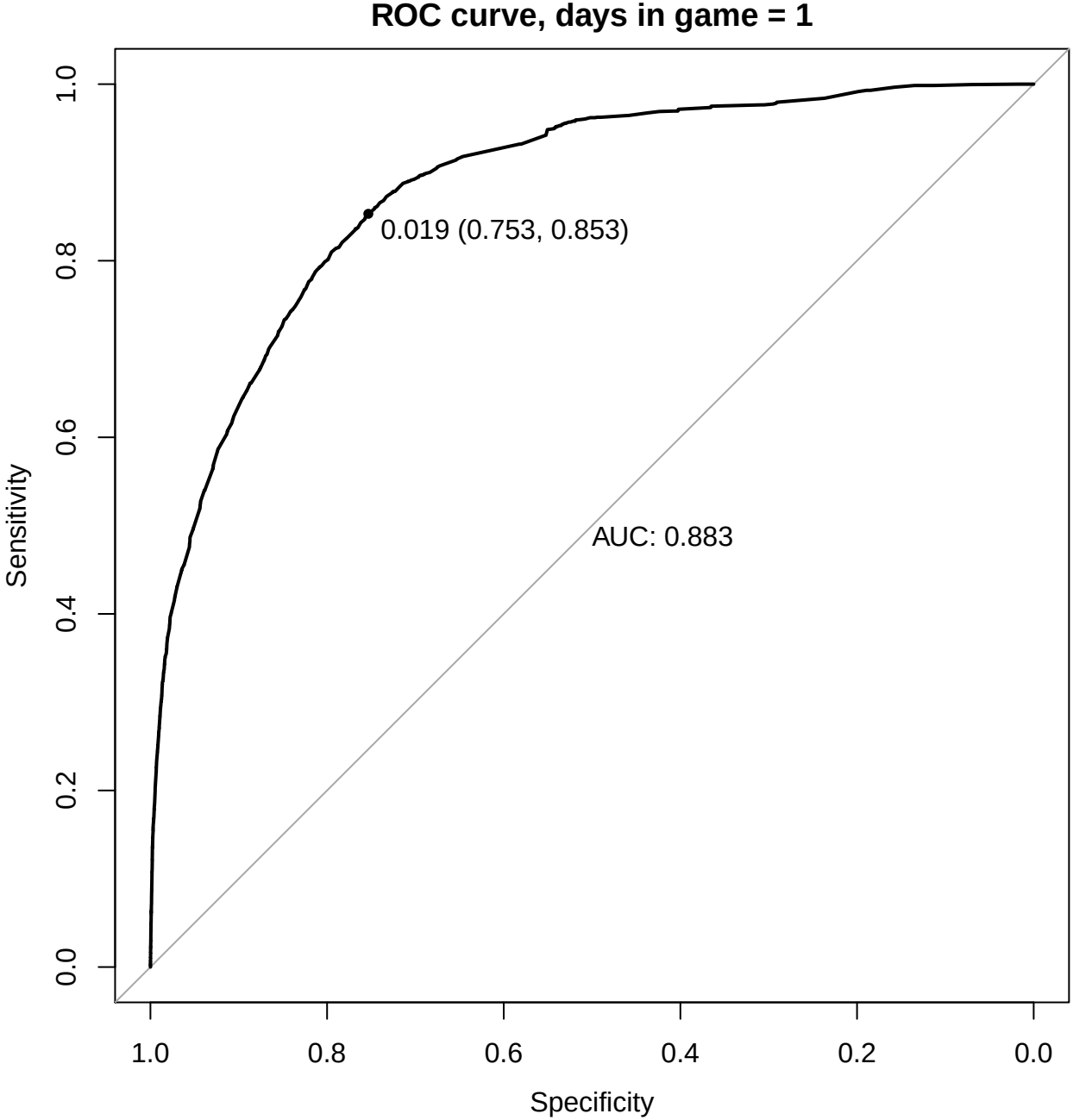

Features, days in game = 0
FALSE
TRUE
dx_active_days
d0_session_count
tier_payers
dx_pay_count
Feature

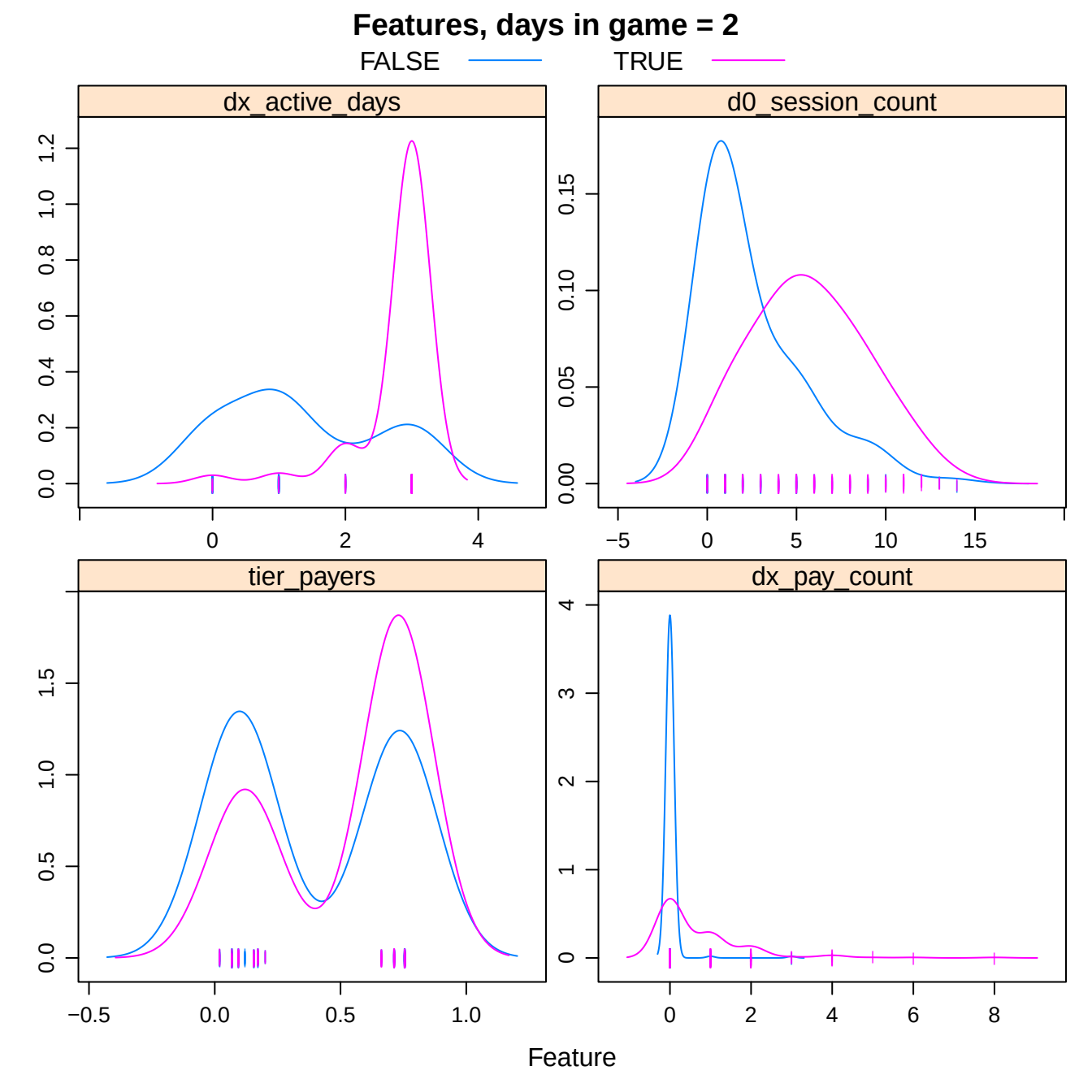
```
Call:
glm(formula = dy_payer ~ tier_payers + dx_pay_count + d0_session_count,
    family = "binomial", data = datTrain)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
−7.5130  −0.1621  −0.1297  −0.0924   3.4017

Coefficients:
                  Estimate Std. Error z value Pr(>|z|)
(Intercept)      −5.806735   0.028340 −204.89   <2e−16 ***
tier_payers       1.459998   0.039475   36.99   <2e−16 ***
dx_pay_count      1.379728   0.021810   63.26   <2e−16 ***
d0_session_count  0.250787   0.003185   78.73   <2e−16 ***
−−−
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 81342  on 476601  degrees of freedom
Residual deviance: 65955  on 476598  degrees of freedom
AIC: 65963

Number of Fisher Scoring iterations: 7
```


ROC curve, days in game = 0
Sensitivity
1.0
0.8
0.6
0.4
0.2
0.0
0.016 (0.806, 0.747)
AUC: 0.854
1.0
0.8
0.6
0.4
0.2
0.0
Specificity

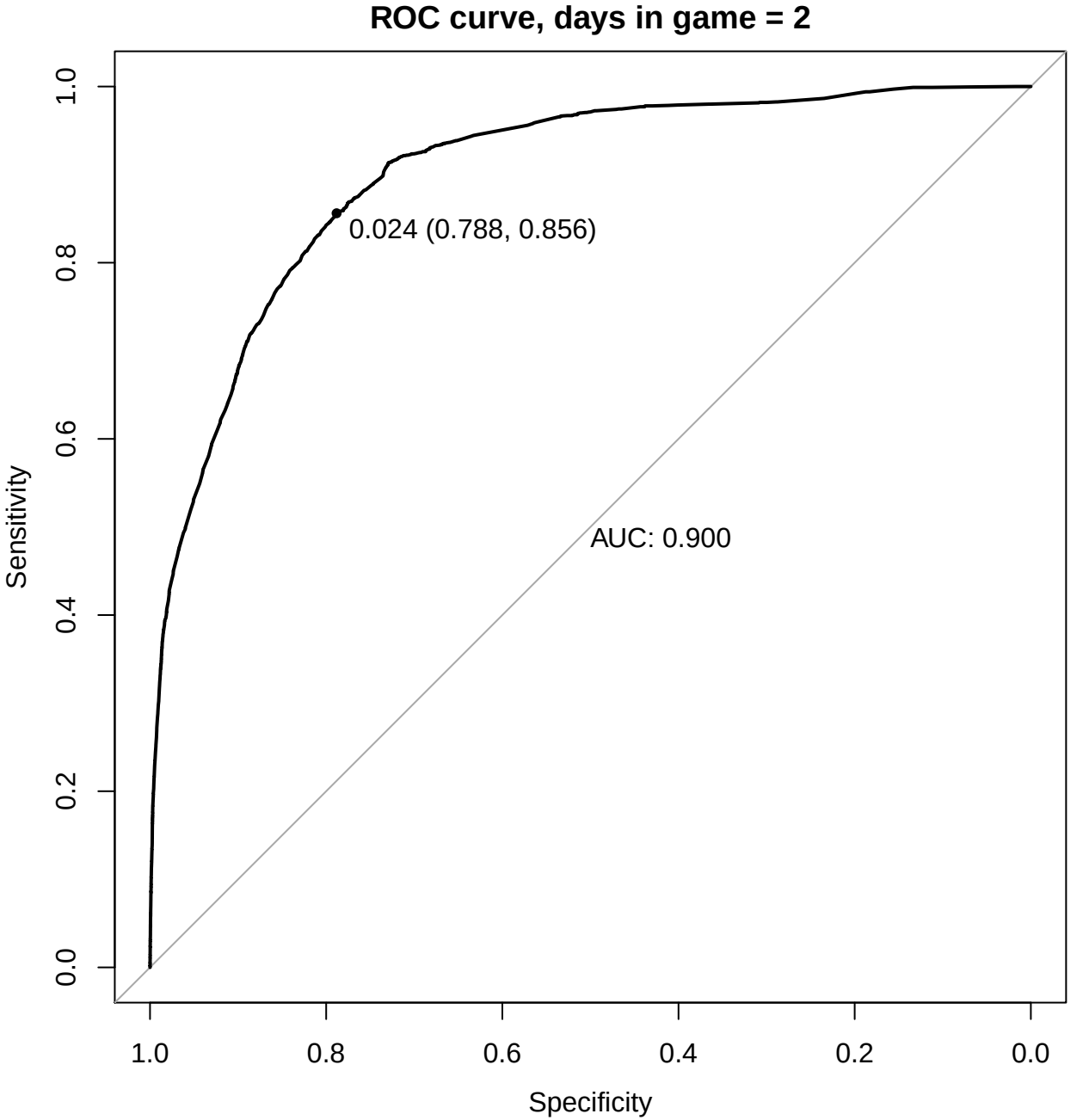

Features, days in game = 1
FALSE
TRUE
dx_active_days
d0_session_count
tier_payers
dx_pay_count
Feature

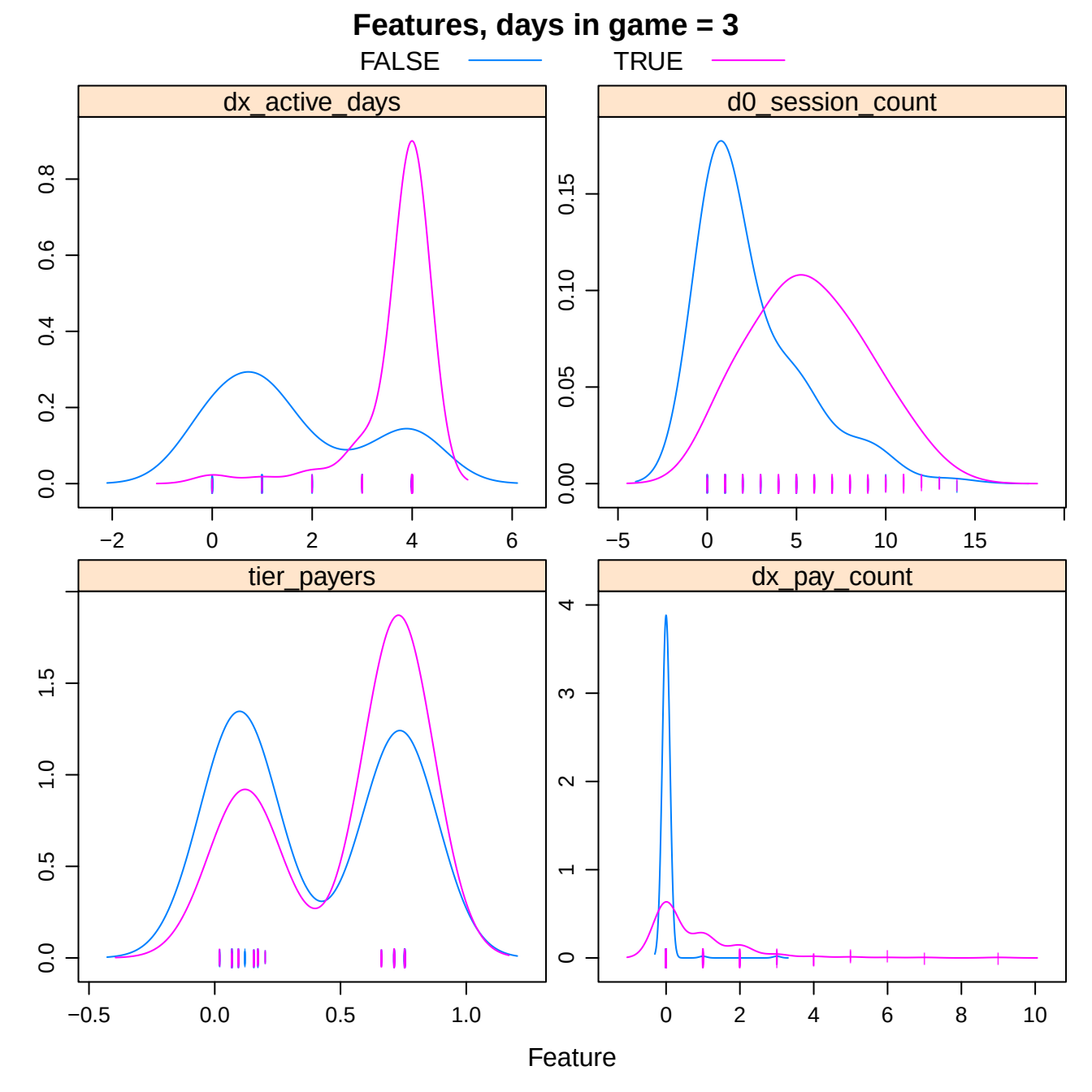
```
Call:
glm(formula = dy_payer ~ ., family = "binomial", data = datTrain)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
−7.0636  −0.1902  −0.0799  −0.0484   3.9304

Coefficients:
                  Estimate Std. Error z value Pr(>|z|)
(Intercept)      −7.745504   0.059572 −130.02   <2e−16 ***
tier_payers       1.317771   0.039809   33.10   <2e−16 ***
dx_pay_count      1.165237   0.017477   66.67   <2e−16 ***
dx_active_days    1.639635   0.033937   48.31   <2e−16 ***
d0_session_count  0.101610   0.004214   24.11   <2e−16 ***
−−−
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 81342  on 476601  degrees of freedom
Residual deviance: 61535  on 476597  degrees of freedom
AIC: 61545

Number of Fisher Scoring iterations: 9
```


ROC curve, days in game = 1
Sensitivity
1.0
0.8
0.6
0.4
0.2
0.0
0.019 (0.753, 0.853)
AUC: 0.883
1.0
0.8
0.6
0.4
0.2
0.0
Specificity

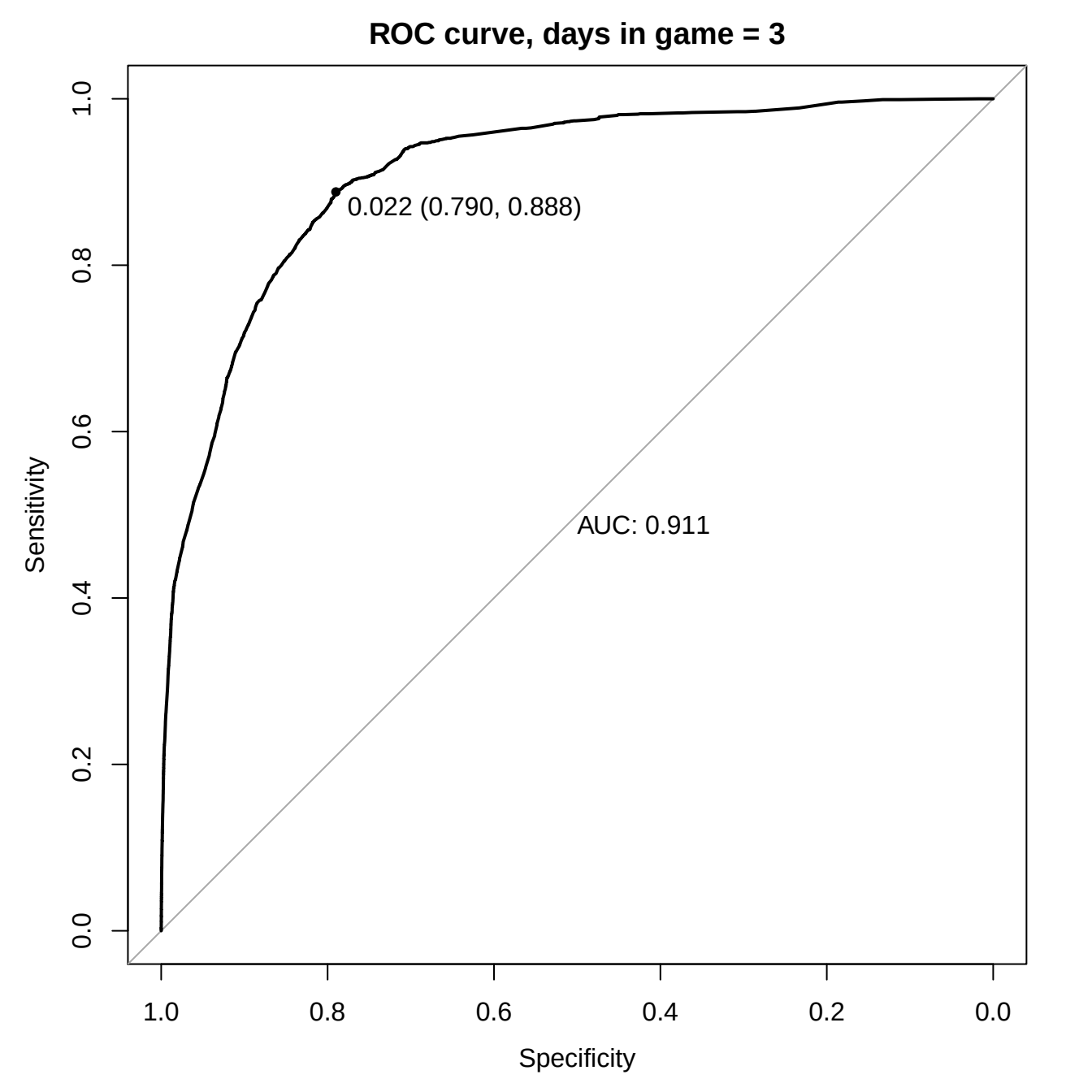

Features, days in game = 2
FALSE
TRUE
dx_active_days
d0_session_count
tier_payers
dx_pay_count
Feature

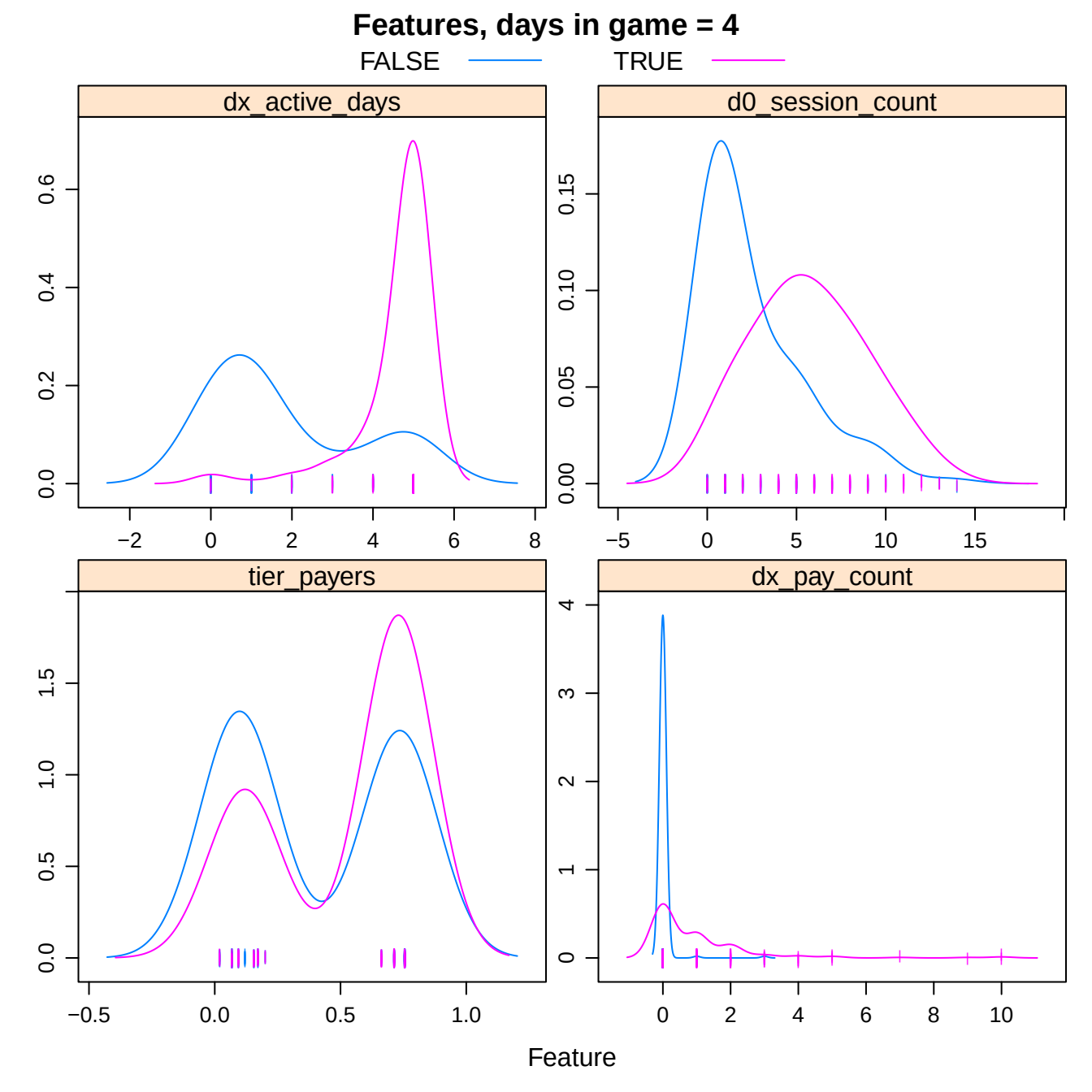
```
Call:
glm(formula = dy_payer ~ ., family = "binomial", data = datTrain)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
−6.8329  −0.1736  −0.0632  −0.0472   3.9351

Coefficients:
                  Estimate Std. Error z value Pr(>|z|)
(Intercept)      −7.763034   0.054685 −141.96   <2e−16 ***
tier_payers       1.272730   0.040258   31.61   <2e−16 ***
dx_pay_count      1.088312   0.015606   69.74   <2e−16 ***
dx_active_days    1.283569   0.020883   61.46   <2e−16 ***
d0_session_count  0.045879   0.004439   10.34   <2e−16 ***
−−−
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 81342  on 476601  degrees of freedom
Residual deviance: 58570  on 476597  degrees of freedom
AIC: 58580

Number of Fisher Scoring iterations: 9
```


ROC curve, days in game = 2
Sensitivity
1.0
0.8
0.6
0.4
0.2
0.0
0.024 (0.788, 0.856)
AUC: 0.900
1.0
0.8
0.6
0.4
0.2
0.0
Specificity

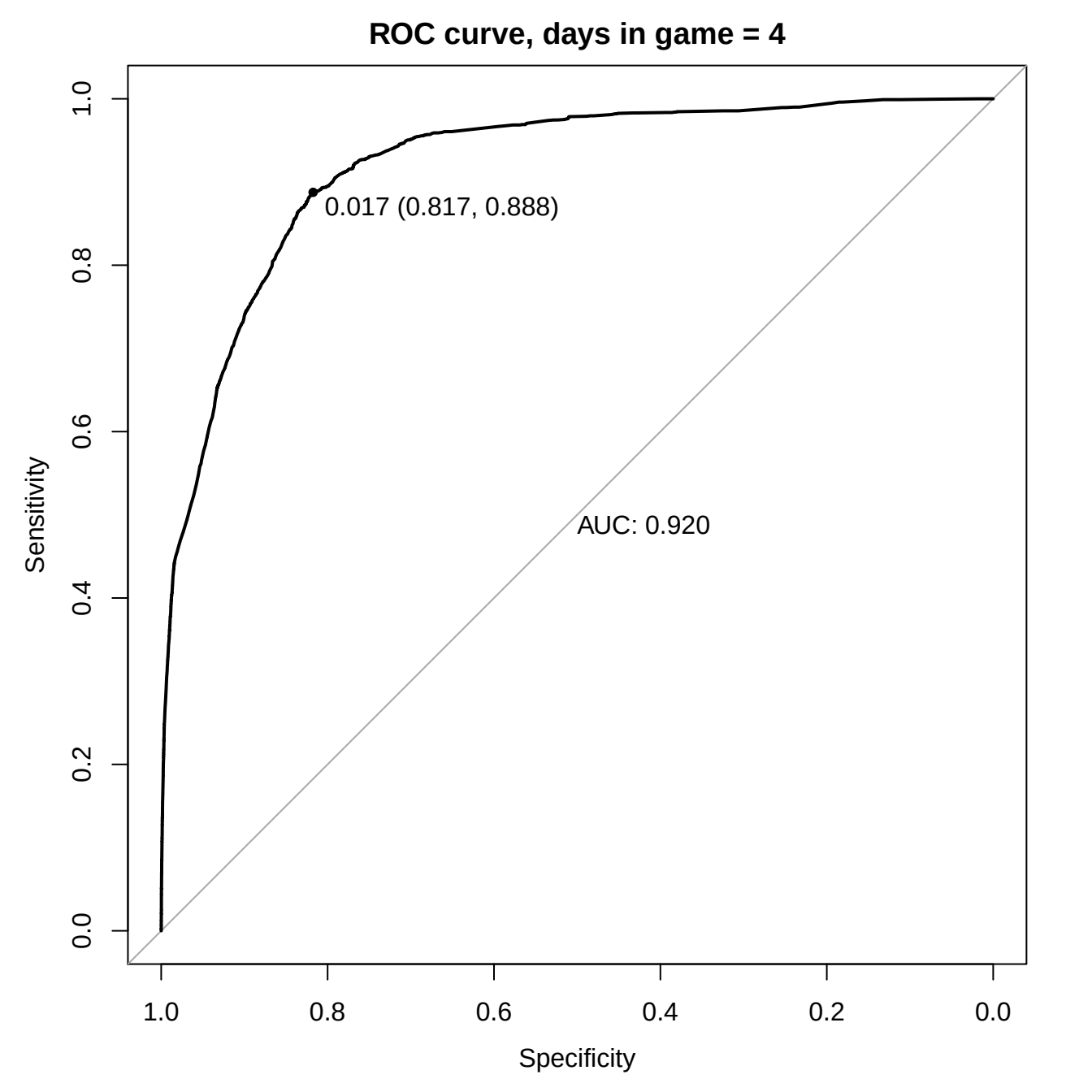

Features, days in game = 3
FALSE
TRUE
dx_active_days
d0_session_count
tier_payers
dx_pay_count
Feature

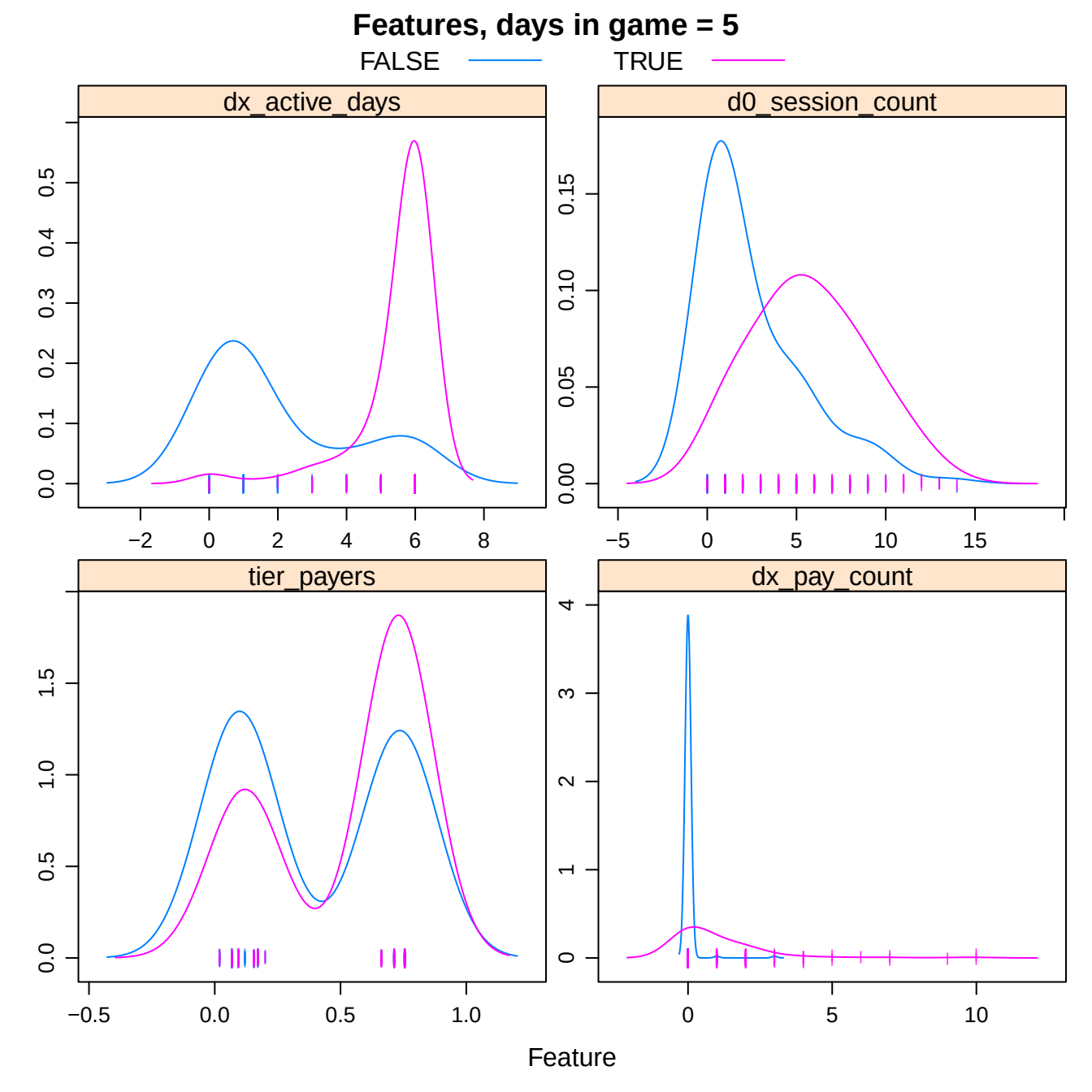
```
Call:
glm(formula = dy_payer ~ ., family = "binomial", data = datTrain)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
−6.6378  −0.1395  −0.0556  −0.0472   3.9309

Coefficients:
                  Estimate Std. Error  z value Pr(>|z|)
(Intercept)      −7.749031   0.053021 −146.151  < 2e−16 ***
tier_payers       1.255253   0.040632   30.893  < 2e−16 ***
dx_pay_count      1.026039   0.014524   70.644  < 2e−16 ***
dx_active_days    1.046065   0.015157   69.017  < 2e−16 ***
d0_session_count  0.014942   0.004536    3.294 0.000988 ***
−−−
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 81342  on 476601  degrees of freedom
Residual deviance: 56423  on 476597  degrees of freedom
AIC: 56433

Number of Fisher Scoring iterations: 9
```


ROC curve, days in game = 3
Sensitivity
1.0
0.8
0.6
0.4
0.2
0.0
0.022 (0.790, 0.888)
AUC: 0.911
1.0
0.8
0.6
0.4
0.2
0.0
Specificity

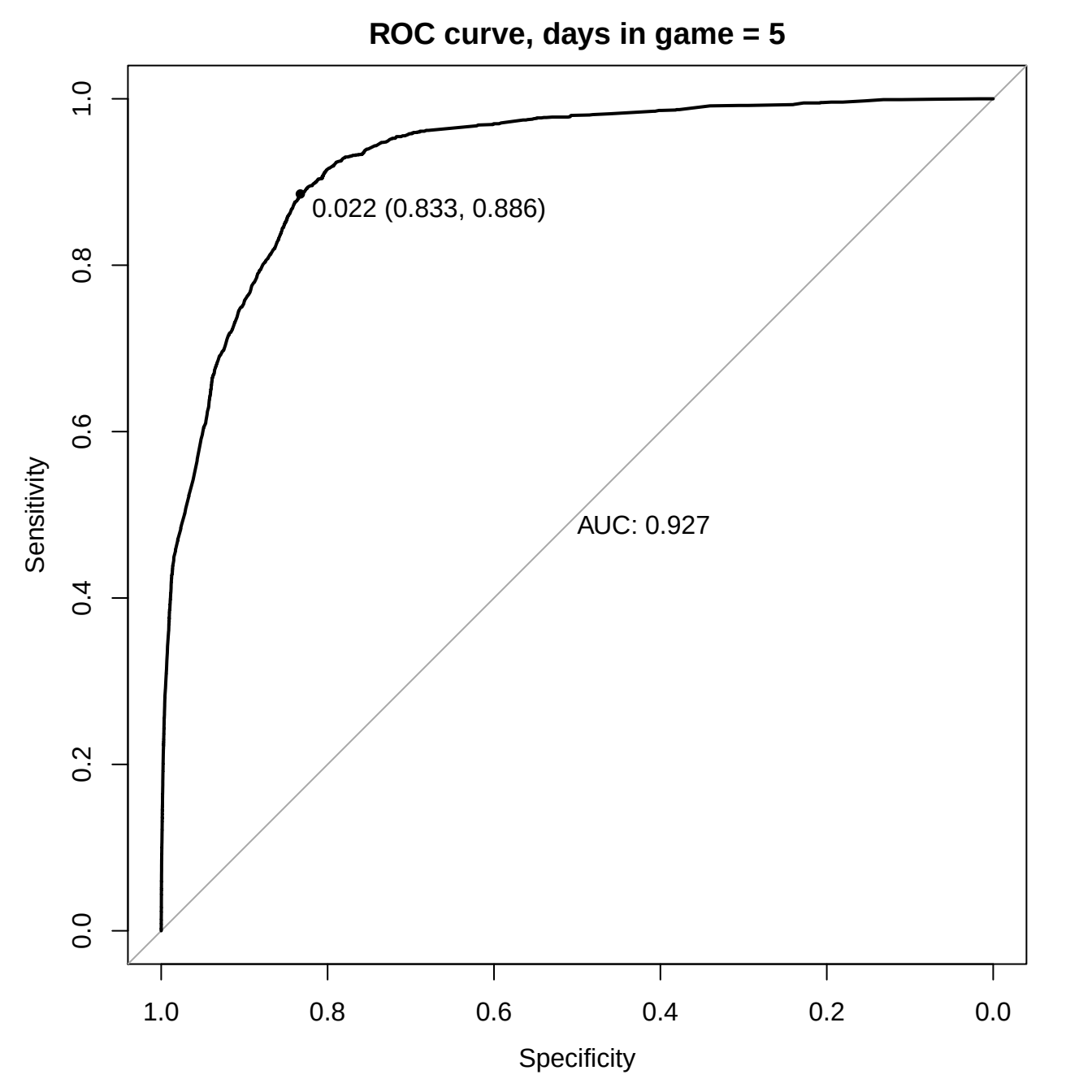

Features, days in game = 4
FALSE
TRUE
dx_active_days
d0_session_count
tier_payers
dx_pay_count
Feature

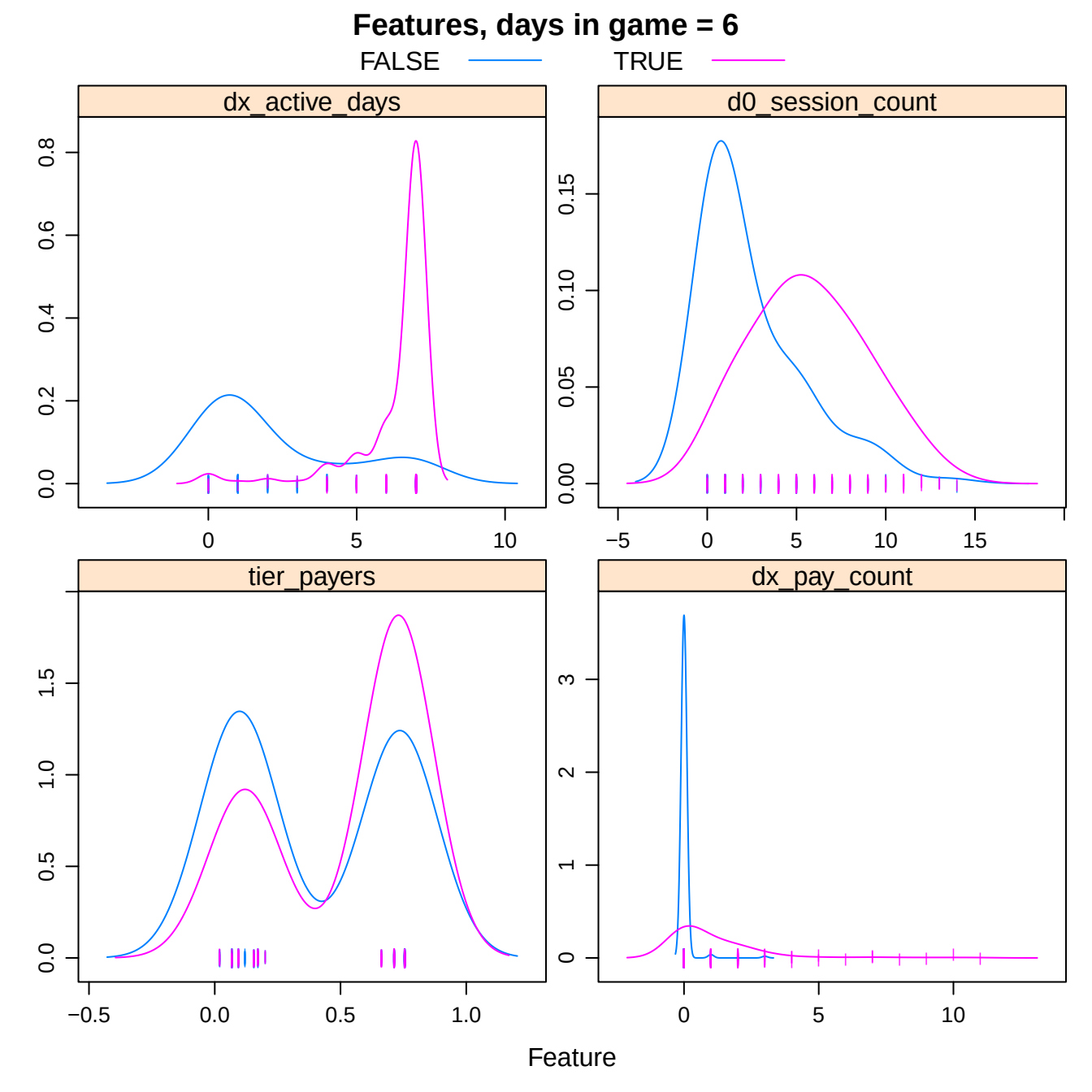
```
Call:
glm(formula = dy_payer ~ ., family = "binomial", data = datTrain)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
−6.3584  −0.1158  −0.0514  −0.0466   3.9233

Coefficients:
                  Estimate Std. Error  z value Pr(>|z|)
(Intercept)      −7.719044   0.052050 −148.301   <2e−16 ***
tier_payers       1.239399   0.040969   30.252   <2e−16 ***
dx_pay_count      0.981365   0.013823   70.996   <2e−16 ***
dx_active_days    0.880344   0.011879   74.111   <2e−16 ***
d0_session_count −0.004898   0.004595   −1.066    0.286
−−−
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 81342  on 476601  degrees of freedom
Residual deviance: 54758  on 476597  degrees of freedom
AIC: 54768

Number of Fisher Scoring iterations: 9
```


ROC curve, days in game = 4
Sensitivity
1.0
0.8
0.6
0.4
0.2
0.0
0.017 (0.817, 0.888)
AUC: 0.920
1.0
0.8
0.6
0.4
0.2
0.0
Specificity

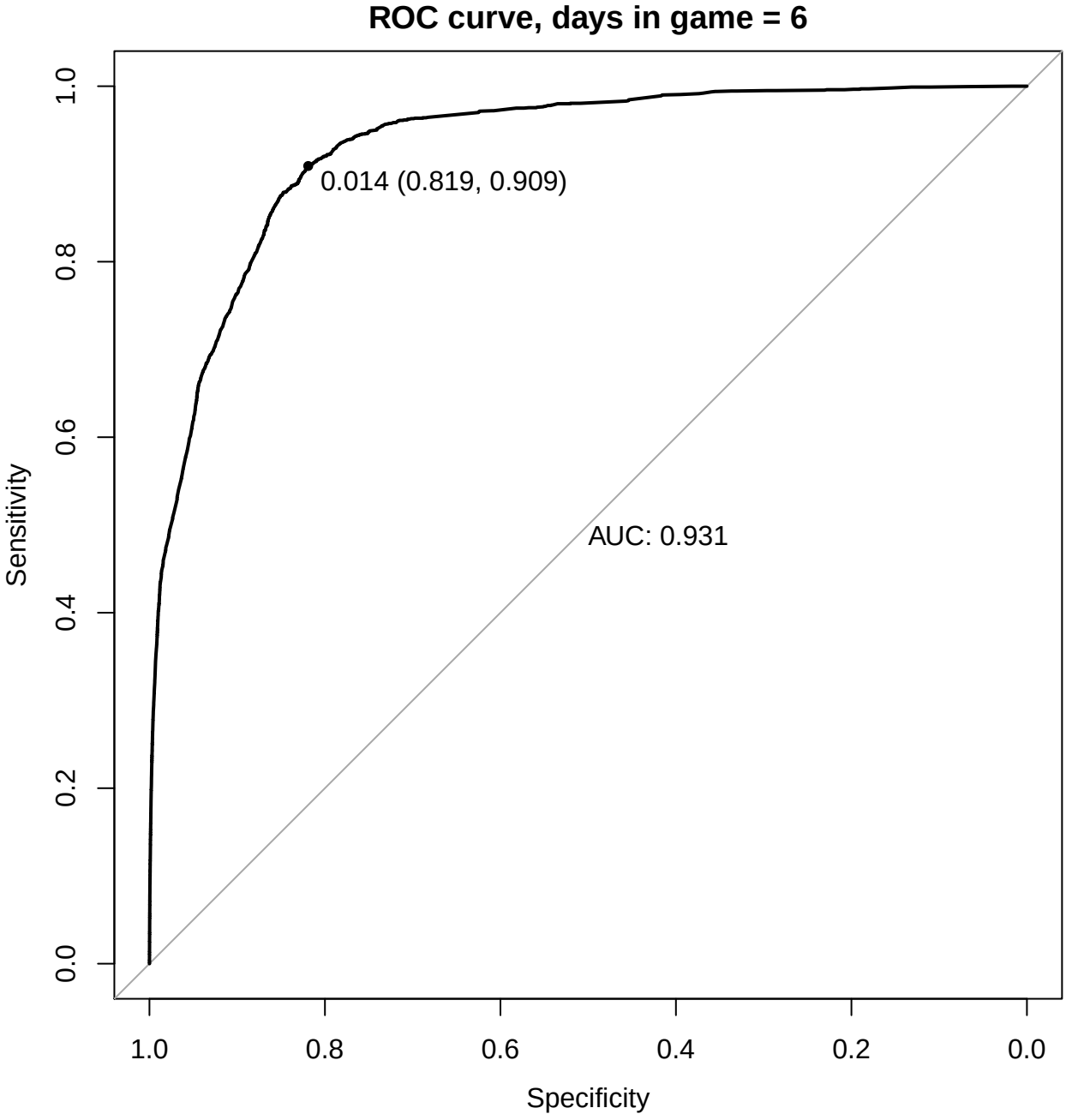

Features, days in game = 5
FALSE
TRUE
dx_active_days
d0_session_count
tier_payers
dx_pay_count
Feature

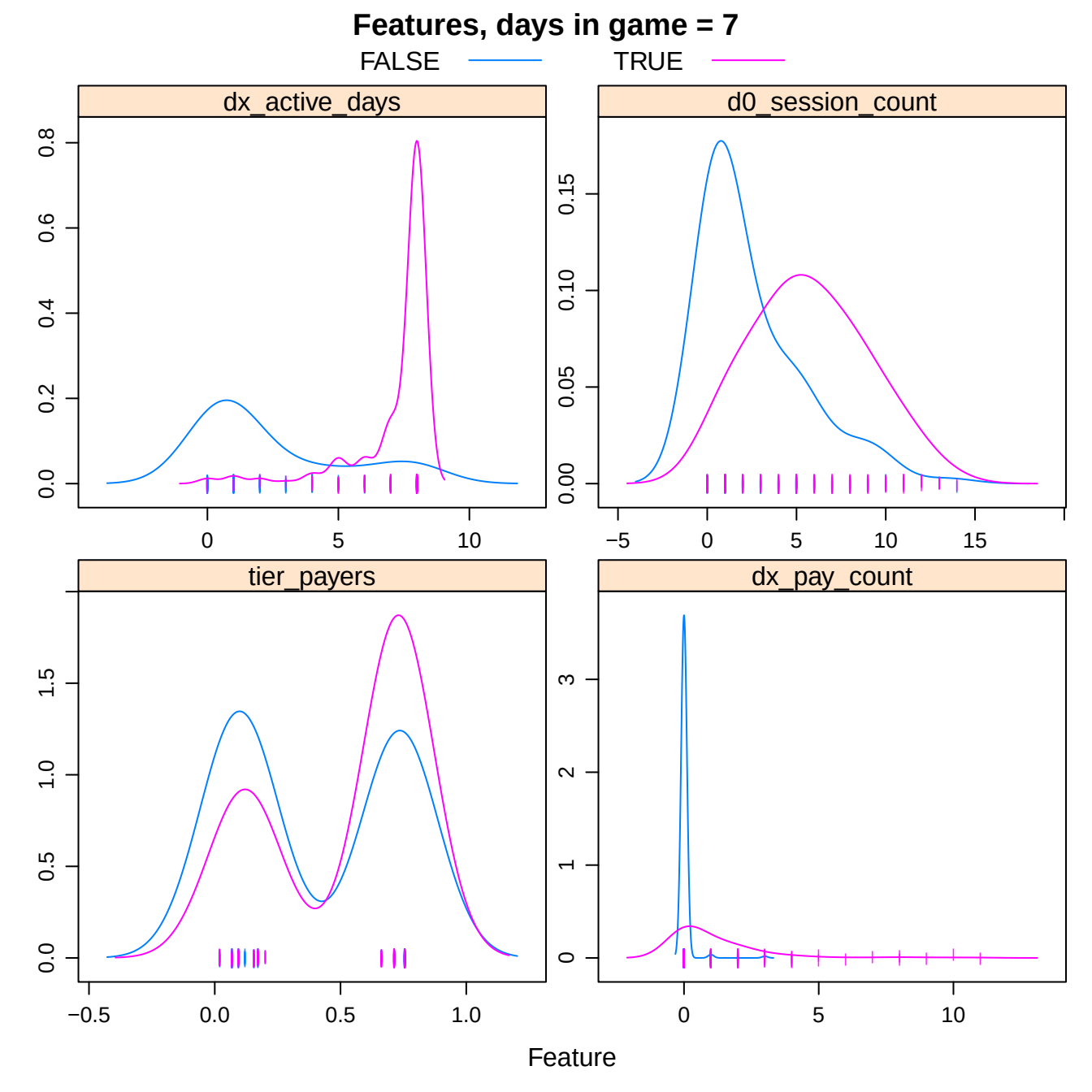
```
Call:
glm(formula = dy_payer ~ ., family = "binomial", data = datTrain)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
−6.1863  −0.1012  −0.0485  −0.0452   3.9175

Coefficients:
                  Estimate Std. Error  z value Pr(>|z|)
(Intercept)      −7.695768   0.051602 −149.137  < 2e−16 ***
tier_payers       1.219258   0.041313   29.513  < 2e−16 ***
dx_pay_count      0.958897   0.013384   71.647  < 2e−16 ***
dx_active_days    0.759590   0.009786   77.621  < 2e−16 ***
d0_session_count −0.018108   0.004633   −3.908  9.3e−05 ***
−−−
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 81342  on 476601  degrees of freedom
Residual deviance: 53232  on 476597  degrees of freedom
AIC: 53242

Number of Fisher Scoring iterations: 9
```


ROC curve, days in game = 5
Sensitivity
1.0
0.8
0.6
0.4
0.2
0.0
0.022 (0.833, 0.886)
AUC: 0.927
1.0
0.8
0.6
0.4
0.2
0.0
Specificity

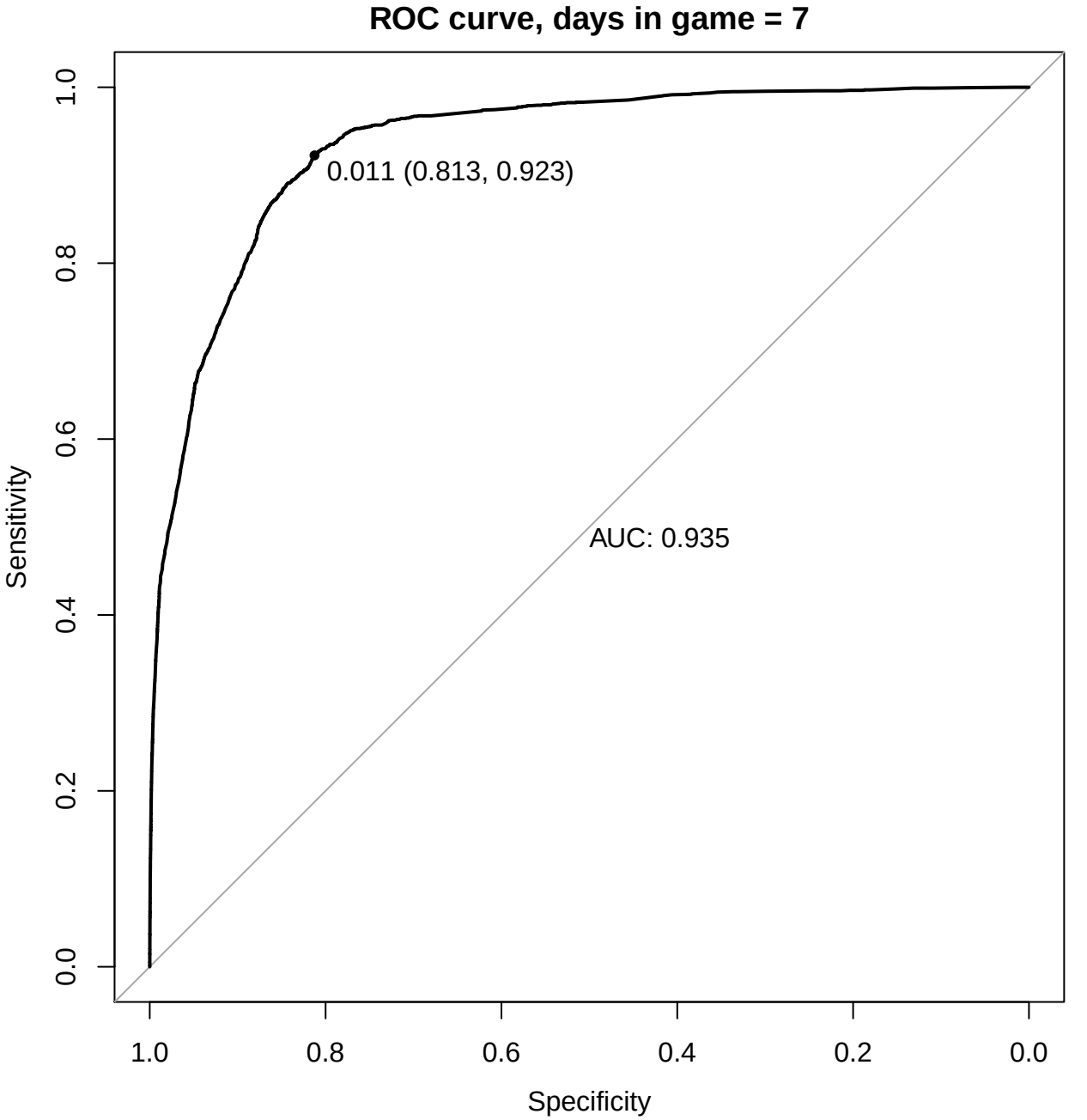

Features, days in game = 6
FALSE
TRUE
dx_active_days
d0_session_count
tier_payers
dx_pay_count
Feature

```
Call:
glm(formula = dy_payer ~ ., family = "binomial", data = datTrain)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
−6.0738  −0.0924  −0.0481  −0.0437   3.9122

Coefficients:
                  Estimate Std. Error  z value Pr(>|z|)
(Intercept)      −7.675021   0.051328 −149.529  < 2e−16 ***
tier_payers       1.208989   0.041637   29.036  < 2e−16 ***
dx_pay_count      0.947050   0.013102   72.284  < 2e−16 ***
dx_active_days    0.667180   0.008316   80.232  < 2e−16 ***
d0_session_count −0.027900   0.004660   −5.987 2.14e−09 ***
−−−
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 81342  on 476601  degrees of freedom
Residual deviance: 51966  on 476597  degrees of freedom
AIC: 51976

Number of Fisher Scoring iterations: 9
```


ROC curve, days in game = 6
Sensitivity
1.0
0.8
0.6
0.4
0.2
0.0
0.014 (0.819, 0.909)
AUC: 0.931
1.0
0.8
0.6
0.4
0.2
0.0
Specificity


Features, days in game = 7
FALSE
TRUE
dx_active_days
d0_session_count
tier_payers
dx_pay_count
Feature

```
Call:
glm(formula = dy_payer ~ ., family = "binomial", data = datTrain)

Deviance Residuals:
    Min       1Q   Median       3Q      Max
−5.9857  −0.0873  −0.0481  −0.0420   3.9113

Coefficients:
                  Estimate Std. Error  z value Pr(>|z|)
(Intercept)      −7.671383   0.051377 −149.314  < 2e−16 ***
tier_payers       1.200933   0.041949   28.629  < 2e−16 ***
dx_pay_count      0.938303   0.012850   73.018  < 2e−16 ***
dx_active_days    0.597234   0.007253   82.345  < 2e−16 ***
d0_session_count −0.035772   0.004688   −7.631 2.33e−14 ***
−−−
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

(Dispersion parameter for binomial family taken to be 1)

    Null deviance: 81342  on 476601  degrees of freedom
Residual deviance: 50785  on 476597  degrees of freedom
AIC: 50795

Number of Fisher Scoring iterations: 9
```


ROC curve, days in game = 7
Sensitivity
1.0
0.8
0.6
0.4
0.2
0.0
0.011 (0.813, 0.923)
AUC: 0.935
1.0
0.8
0.6
0.4
0.2
0.0
Specificity