. logit MR\_indicator, vce(cl mineid) offset(lnhours) or

Iteration 0: log pseudolikelihood = -3081.8508

Iteration 1: log pseudolikelihood = -3080.7305

Iteration 2: log pseudolikelihood = -3080.7304

Logistic regression Number of obs = 6,253

Wald chi2(0) = .

Log pseudolikelihood = -3080.7304 Prob > chi2 = .

(Std. Err. adjusted for 1,238 clusters in mineid)

------------------------------------------------------------------------------

| Robust

MR\_indicator | Odds Ratio Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_cons | .0000159 5.74e-07 -305.50 0.000 .0000148 .000017

lnhours | 1 (offset)

------------------------------------------------------------------------------

. lfit

Logistic model for MR\_indicator, goodness-of-fit test

number of observations = 6253

number of covariate patterns = 1

Pearson chi2(0) = 0.00

Prob > chi2 = .

. linktest

Iteration 0: log likelihood = -4299.6702

Iteration 1: log likelihood = -3040.0027

Iteration 2: log likelihood = -3016.2028

Iteration 3: log likelihood = -3016.1433

Iteration 4: log likelihood = -3016.1433

Logistic regression Number of obs = 6,253

LR chi2(2) = 2567.05

Prob > chi2 = 0.0000

Log likelihood = -3016.1433 Pseudo R2 = 0.2985

------------------------------------------------------------------------------

MR\_indicator | Coef. Std. Err. z P>|z| [95% Conf. Interval]

-------------+----------------------------------------------------------------

\_hat | 1.373769 .0377239 36.42 0.000 1.299831 1.447707

\_hatsq | .0540479 .0259748 2.08 0.037 .0031383 .1049575

\_cons | -.105095 .0369067 -2.85 0.004 -.1774307 -.0327593

------------------------------------------------------------------------------

. estat classification

Logistic model for MR\_indicator

-------- True --------

Classified | D ~D | Total

-----------+--------------------------+-----------

+ | 2854 875 | 3729

- | 601 1923 | 2524

-----------+--------------------------+-----------

Total | 3455 2798 | 6253

Classified + if predicted Pr(D) >= .5

True D defined as MR\_indicator != 0

--------------------------------------------------

Sensitivity Pr( +| D) 82.60%

Specificity Pr( -|~D) 68.73%

Positive predictive value Pr( D| +) 76.54%

Negative predictive value Pr(~Da| -) 76.19%

--------------------------------------------------

False + rate for true ~D Pr( +|~D) 31.27%

False - rate for true D Pr( -| D) 17.40%

False + rate for classified + Pr(~D| +) 23.46%

False - rate for classified - Pr( D| -) 23.81%

--------------------------------------------------

Correctly classified 76.40%

--------------------------------------------------

. summ MR\_indicator null\_yhat

Variable | Obs Mean Std. Dev. Min Max

-------------+---------------------------------------------------------

MR\_indicator | 6,253 .5525348 .4972722 0 1

null\_yhat | 6,253 .5525348 .2479745 .0010138 .9780964