Calibration in the large: property of the full sample

Predicted prob. of survival (1 = survived, 0 = not) for 10 Titanic passengers of different sex

Probability	Actual		Probability	Actual
0.12	0		0.35	0
0.72	1		0.26	0
0.43	1	2	0.29	0
0.27	0	2	0.66	1
0.52	1		0.38	0

Mean probability of survival of model:

0.4

Observed frequency of survival in sample:

0.4

Calibration in the large:



Calibration in the small: property of subsets

Predicted prob. of survival (1 = survived, 0 = not) for 10 Titanic passengers of different sex

	Probability	Actual		Probability	Actual
	0.12	0		0.35	0
2	0.72	1		0.26	0
	0.43	1	2	0.29	0
	0.27	0		0.66	1
	0.52	1		0.38	0

Mean probability of survival of model:

male: 0.25 female: 0.50

Observed frequency of survival in sample:

male: 0.0 female: 0.67

Calibration in the small:

male: 0.25 * 0.0



female: 0.5 * 0.67

Predicted prob. of survival (1 = survived, 0 = not) for 6 Titanic passengers of different gender

Probability	Actual	Calibration in the property of full s
0.2	0	Mean predicted
0.8	0	probability of sur
		0.5
0.9	1	
0.1	0	Observed probab of survival in sam
		0.5
0.7	1	Calibration in the
0.3	1	0.5 = 0.5

e large: sample

rvival:

bility nple:

e large:

Predicted prob. of survival (1 = survived, 0 = not) for 6 Titanic passengers of different gender

	Probability	Actual	Calibration in the large: property of full sample	Calibration in the small: property of subsets
	0.2	0		
	0.8	0	Mean predicted probability of survival:	Mean predicted probability of survival:
	0.9	1	0.5	male: 0.20 female: 0.80
2	0.1	0	Observed probability of survival in sample:	Observed probability of survival in sample:
	0.7	1	0.5	male: 0.33 female: 0.67
	0.7	'	Calibration in the large:	Calibration in the small:
	0.3	1	0.5 = 0.5	male: 0.20 ≠ 0.33 S female: 0.80 ≠ 0.67 S