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		0.29	0
	0.27	0		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:

0.4 = 0.4

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
	0.72	1		0.26	0
	0.43	1		0.29	0
	0.27	0		0.66	1
	0.52	1		0.38	0

Mean probability of survival of model:

female: 0.25
male: 0.50

Observed frequency of survival in sample:

female: 0.0
male: 0.67

Calibration in the small:

female: 0.25 ≠ 0.0 ✗
male: 0.5 ≠ 0.67 ✗