# Attribute Inference

*Infer missing attributes from available data and **model***

| Hospital | Gender | Source | Stay Length | Patient Age | Ethnicity | Charges | … | Procedure |
|----------|--------|--------|-------------|-------------|-----------|---------|---|-----------|
| 102 | 1 | 6 | 10 | 11 | ? | $34920.33 | … | 34 |
| 102 | 0 | 2 | 3 | 8 | ? | $4062.46 | … | 95 |
| 350 | 0 | 6 | 23 | 18 | ? | $105239.23 | … | 62 |

$\mathscr{D}$

Some knowledge of a data distribution

$M$

**Model trained for some other task**

(e.g., procedure prediction)

Prediction Algorithm

Ethnicity (Hispanic?)