Objective: To analyze the impacts of hospital-acquired complications (HACs) and benchmark the efficiency of hospitals.

Data: Original cohort: 135,399 patients admitted to public hospitals in 2010 with follow-ups until 2015. The data were linked with other administrative sources.

Methods:
- Generalized linear models: HAC effects on in-hospital mortality and 30-day readmission; hospital costs, LOS
- Data envelopment analysis was applied to benchmark the patient safety performance of hospitals.

Results:
- HAC rate of multiday admission: 9.3%
- CVD patients with HACs were 2.5 times more likely to die in hospital, incurred $24,000 hospital costs (vs $7700) and stayed 18 days (vs 6 days) in hospitals.
- HAC rates can be reduced by 14% (saving $116 m) by learning from best-practice hospitals.

Conclusion:
- HAC was associated with poorer health outcomes & higher costs.
- HAC can be reduced by learning from best practices.