

Economic Models and Infection Control Interventions

Nosocomial infections are frequent, costly and many are preventable. The challenge for healthcare decision makers is to invest only in programmes that are efficient. Rather than rely on traditional prospective clinical studies that measure single outcomes and subject the data to a hypothesis test, an approach is presented that estimates many parameters simultaneously and reveals whether an infection control programme is likely to be efficient or not. Arbitrary thresholds of 0.05 are shown to be irrelevant for decision-making, and even biased evidence can add value. The value of collecting prospective data to reduce decision uncertainty is also shown. To finish, some examples of applied research about the economics of reducing line related blood stream infection in the ICU and infections in total hip replacement are discussed.