

Assignment 1

Due: July 22, 2010, 5:10 P.M.

Many patients in Ontario who need a hip replacement surgery have to wait significantly longer than the maximum acceptable waiting time of about 26 weeks. As a consequence, patients are exposed to additional health risks and they also face financial costs because of their reduced ability to work. The Ministry of Health and Long-Term Care wants to design a contract with hospitals to reduce the waiting time for the hip replacement surgeries.

1. Interpret this problem in terms of the principal-agent relationship.
2. Assume that the Ministry can observe the hospital's effort. Explain in detail how the Ministry should design an optimal salary contract.
3. Assume now that the Ministry cannot observe the hospital's effort. Explain in detail why the salary contract may not help reduce the waiting time for the hip surgeries.
4. Explain in detail how the Ministry should design an optimal piece-rate contract if the hospital's effort cannot be observed or verified.
5. Describe in detail how could the Ministry conduct an experiment to determine whether the piece rate contract produces a better outcome (i.e. a shorter waiting time) than the salary contract.

Guidelines

1. You are encouraged to form a group with another 1 to 3 students and submit a single assignment for the group. All students in the group will receive the same grade. You also have an option to work alone.
2. The assignment should be typed on a double-sided paper. It should not exceed 1,500 words (approximately 3 pages).