Abstract

We investigate the welfare implications of doctors in the context of matching them with hospitals (a one-to-many matching problem) by examining the effect of improving the ranking of a rural hospital for each doctor. Our goal is to ensure that such improvements have a positive impact on each doctor, i.e., each doctor ranks her new assignment at least as high as her initial assignment under her new preference. However, the doctor-optimal stable solution does not meet this requirement, except in cases where the rural hospital is initially vacant. In fact, no stable solution satisfies this requirement. Therefore, we explore the circumstances under which the doctor-optimal stable solution does meet this requirement. We find that if the number of doctors who improve the ranking of the rural hospital is no greater than the number of empty seats the hospital initially had, then no doctor is negatively affected by the solution.