



MTシステムによる OECD 35 か国の医療制度パフォーマンスの評価

—単位空間のメンバーが1つの場合の評価法—

*Evaluation of the Performance of Health Systems in OECD 35 Countries
—Mahalanobis-Taguchi-system Analysis with One-member Unit Space—*

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The OECD evaluates the performance of the health systems of its 35 member countries relative to the mean values of 22 indices, but does not evaluate the set of all 22 indices taken together. A set evaluation was therefore attempted by use of the Mahalanobis-Taguchi system with a unit space having only one member (one-member T method). Two cases were considered: (1) use of the set of mean values of the 22 indices as the unit space, and (2) use of the set of best values of the 22 indices as the unit space. The transferability S/N ratio was calculated for each case, and the correlation between the transferability S/N ratio and the mean life expectancy at birth, which is the most frequently used indicator of health, was investigated. When the best values were used as the unit space, the coefficient of correlation between the mean life expectancy at birth and the transferability S/N ratio was 0.6643, indicating a stronger correlation than when the mean values were used. The one-member T method with the best values set as the unit space was therefore thought to be useful in evaluating OECD health system performance.

Key words: Organization for Economic Co-operation and Development (OECD), performance of health systems, Mahalanobis-Taguchi (MT) system, transferability S/N ratio, one-member T method, Taguchi Methods, quality engineering

1. はじめに

医療の主な目的は、平均寿命を延ばすことである。経済協力開発機構 (OECD) は 2009 年に平均寿命

と 1 人当たりの医療費が正の相関を示すことを報告し、そして米国、デンマークおよびハンガリーは医療費が高い割に平均寿命が短い、日本は医療費の割に平均寿命が長く、医療制度のパフォーマンスは 1 位と評価した¹⁾。しかしながらその後、日本の総医療費の対 GDP 比は上昇し、OECD 加盟国 35 か国のうち 2015 年 8 位から 2016 年 3 位にランクされ

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