

health services purchasers are giving up to introduce a new treatment; current estimates bypass this lack of information by averaging the effects of changes in expenditure by clinical area; (iii) recent methodologies consider a single health outcome: mortality; however, health outcomes of many clinical areas may not be well reflected in mortality.

**METHODS:**

We propose data envelopment analysis (DEA) as a methodology that can help to address these issues by considering efficiency to measure opportunity cost per Primary Health Trust (PCT) in England and by including several outcomes in addition to mortality. This is the first time that DEA is tested in this context.

**RESULTS:**

Results suggest that the majority of health locations have the possibility of decreasing their expenditures between 1 percent and 15 percent without affecting outcomes.

**CONCLUSIONS:**

Estimation of the threshold should allow for observation of the actual level of inefficiencies as well as an ability to consider the previous capacity of health locations to respond to changes in expenditures. Moreover, it is crucial to select the appropriate set of health outcomes, such that they reflect health system priorities, otherwise, we would be estimating a threshold that does not reflect likely displacement.

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**PP128 Relationship Between Hemoglobin A1c And Medical Costs**

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**INTRODUCTION:**

Diabetes causes complications and collateral diseases, reducing quality of life and increasing medical costs. The Japanese government has promoted measures for the prevention of diabetes aggravation. Although

glycemic control is reported to prevent the development of complications, assessment of the effects on overall medical cost is insufficient. We examined the medical cost by the analysis of hemoglobin A1c (HbA1c) level.

**METHODS:**

A Japanese employee-based health insurance claims database with annual medical check-up data was analyzed. Excess medical cost was calculated as the difference between medical cost and standard medical cost (defined as the average medical cost for individuals of same age and sex). Percentage of excess medical cost was calculated by dividing excess medical cost by standard cost, and compared between individuals with or without treatment for diabetes.

**RESULTS:**

Of 4,307,184 individuals with HbA1c data, four percent of them received treatment for diabetes. For treatment of 6.5 percent of HbA1c, excess medical cost increased to 124 percent. The medical cost increased by an additional 20.4 percent (95% CI: 17.1–23.8) when the HbA1c level increased one percent. Treatment for less than six percent of HbA1c caused an increase consistent with the HbA1c level. The relative risk of iron deficiency anemia, unspecified of those with less than six percent of HbA1c against those with seven to eight percent was the highest, 2.15.

**CONCLUSIONS:**

An increase of medical cost for individuals with treatment for high HbA1c is likely associated with diabetic complication. The raise for individuals with lower HbA1c level may be related to anemia. Despite the younger age and healthier life of the analyzed individuals, since they were insured by employee-based health insurance who took regular medical check-ups, more expensive medical cost was observed for those having higher HbA1c level.

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**PP129 The Need For Building Pharmacists HTA Capacity; The Nigerian Scenario**

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