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PP079 The Construction Of Database Using Japanese National Claims Database

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INTRODUCTION:

In 2014, the Ministry of Health, Labor and Welfare (MHLW) in Japan began to assume a cost-effectiveness perspective. Some expensive pharmaceutical and medical devices have been regulated, which resulted in a drastic change of the healthcare system.

The Japanese National Insurance Claims Database (NDB) is an administrative database based on claims data from Medical Insurance Claims since 2008. The government enacted the Act on Assurance of Medical Care for Elderly People during health care reform in 2008. In 2006, the MHLW commenced discussions on a framework for the optimization of the healthcare expenses, which aimed to evaluate the structure of the increase in healthcare expenditure.

The NDB was developed as a tool for investigation and analysis by the MHLW in the context of the Healthcare reform. In addition, the NDB was used for the development of academic research in order to contribute to the implementation and evaluation of healthcare policy management.

A major strength of the NDB is its exhaustiveness or completeness of insurance claims. The NDB collects data from all insured people nationwide and covers all medical institutions in Japan.

METHODS:

We applied to the Expert Meeting on Provision of Medical Insurance Claims to examine the research plan, items extracted, and data management. Inpatient and Outpatient information was extracted on medical procedures and payment. Diagnoses for both inpatients and outpatients are coded according to the International Classification of Diseases Tenth Edition (ICD-10). The coding of treatments and surgeries follow Japan's local procedure and surgical coding, which was specifically developed for insurance claims.

RESULTS:

We generated any personally traceable patient ID from the "hash ID" generated by patient name, sex, date of birth, and insurer number with the aim of protecting personal identifying information in the NDB. The disease of stroke was defined to analyze the database for cost-effectiveness analysis, and to connect disease information to. The prescription claims information described pharmaceutical names, prescription date, total dose, and number of days.

CONCLUSIONS:

Our study showed the new standard way of analysis for cost-effectiveness analysis using the Japanese National Insurance Claims Database.

PP081 Relation Between Pain And Treatment/Activity Based On Mobile App Data

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INTRODUCTION:

Recently, a number of mobile apps to record symptoms and medication by patients themselves have been developed. These apps are expected to improve the patients' symptoms through self-management, and to enable a smooth decision making through effective communication between doctors and patients. "Itami Renrakucho" (Pain Diary, Welby Inc.) is one of these apps that records body pain, medication, physical conditions, and activity in life. We examined the relationship between pain and medication/activity based on its data.

METHODS:

Data between 25 December 2015 and 9 December 2016 were used. Medication and degree of pain (0-10, low < high) were recorded at morning, daytime, evening, and bedtime. Of ninteen activities, up to three were recorded about whether they could or could not do them. We compared the degree of pain among different frequency/timing of medication, or activities that they could or could not do.

RESULTS:

Data included 708 individuals. Among 561 individuals who answered about pain, the mean (Standard Deviation, SD) degree was 5.0 (2.3). The mean degree in individuals taking 0, 1, 2, 3, and 4 times medication a day were 4.6, 5.0, 5.4, 5.5, and 6.2, respectively. Regarding medication timing and degree of pain in two consecutive time points (t_0, t_1) , regression towards the mean occurred for individuals without medication in both time points. The degree changed more for individuals taking medicine only at t_0 , but not for those taking at both time points. Weaker pain was reported when they could do hanging laundry and rising early than when they could not, but they could do shopping, strolling and light exercise even having stronger pain.

CONCLUSIONS:

We showed a tendency of relationship between pain and medication/activity based on the data from the app. More data and connecting to claims will help us to show characteristics of patients and diseases, select a treatment, and evaluate a medicine.

PP084 Diabetic Macular Edema: A Comparison Between Treatment Options

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INTRODUCTION:

Health Technology Assessment (HTA) aims at providing decision makers with relevant data, matching different perspectives, with an evidence-based approach. The most common framework used is the European Network for Health Technology Assessment (EUnetHTA) Core Model (1): HTA may be further supported by a Multi-Criteria Decision Analysis (MCDA) (2,3), leading to a final quantitative synthesis, facilitating the appraisal phase.

This project presents a multi-dimensional comparison of the technologies available for the treatment of diabetic macular edema (Ranibizumab, Aflibercept, Dexamethasone implant and off-label Bevacizumab), comparing three Italian Regions: Lombardy, Liguria and Veneto.

METHODS:

The nine EUnetHTA dimensions were first prioritized by seventeen multidisciplinary evaluators. Thereafter a further nine professionals attributed a 3-level rating score (from "1" not performant, to "3" most performant) to each dimension and sub-dimension, after carefully assessing the three HTA reports. In conclusion, the investigation of statistically significant differences between the attributed scores of the evaluators was conducted, using a multi-variate analysis.