

データベース医学の幕開け

The Birth of the Database Medicine

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KEY WORDS

データベース医学, ナショナル・データベース, NDB, レセプト分析

SUMMARY

Database Medicine is an emerging field of research, defined as the medical science replicating the clinical status of patients through a combination of proxy variables in real-world datasets. The National Database of Health Insurance Claims and Specific Health Checkups of Japan (NDB) is a comprehensive database of health insurance claims under Japan's National Health Insurance system, which is a leading example of real-world datasets. Given that Japan has a universal health coverage system and that the population of Japan is over 126 million, the NDB is one of the world's largest health-related databases and contains complete datasets of information on insured medical care. There are, however, many complexities in handling NDB datasets stemming from the structure of NDB and characteristics of the system of health insurance claims. NDB contains mainly process indicators, but not outcome indicators; NDB provides details regarding which clinical examination and medical procedures were performed, but not regarding the patient outcomes such as lab results and prognosis. Database Medicine aims to replicate outcomes using these process indicators.

物理学者からの問い

素粒子物理学, 特にスーパーカミオカンデにかかわるニュートリノ物理学の分野で多くの業績を上げ, ノーベル物理学賞を確実視されつつ病で逝去した戸塚洋二博士は, 逝去の前月(2008年6月)に行った対談で次のように述べている。

「がんになってわかったことですが, 医師というのは意外なことに, 数値を使わない。CTの写真も, 『これとこれは同じくらいですね』で終わり。(略)CT写真を検討するのも大体数分程度。私たちからすると, 大雑把。我々のような実験物理学者だったら, CT写真だ