ECONOMIC ANALYSIS OF REGIONAL MEDICAL INFORMATION SYSTEMS IN JAPAN

The regional medical information network connects medical institutions in the region to share residents’ medical data such as images of x-ray and endoscope, diagnosis, past history of medical treatment, medication, and so on. As a result, it leads to promote efficiency and reduction of medical expenditure by preventing double medical checks or medications. Toward the age of big data or AI, the network becomes more important. This paper is based on the field research on regional medical information networks in Japan and compare their aims, operation, information systems, and effects to medical institutions, clinics, and residents. Cases compared are Ajisai (hydrangea) Net in Nagasaki, Japan, and Healthix in In New York, US. Ajisai Net connects 282 hospitals and clinics in the regions and about 50,000 residents are registered. One of its characteristics is for clinic to access to medical data of patients who were transferred to large hospitals and see their real time medical situations. The costs to clinics include initial fees which are JPY 83,000 (USD750) and monthly fees amounted to JPY4,000 (USD36). The network of Healthix connects about 500 medical institutions which share the health records of 18 million residents which include diagnosis, medication, examinations, allergy, and so on. In addition to prevention of double medical examination, or double medication, the network contributes to promotion of efficiency of medicine, and the data accumulated in the network is used for “Population Risk Management” to predict diseases. This study is to examine the economic analysis of regional medical information system.

Biography
Masatsugu Tsuji received PhD in Economics from Stanford University in 1976. He is currently working as a Professor at Kobe International University. His serves include visiting professors of Carnegie Mellon University, US and National Cheng Kung University, Taiwan; Board of Director, International Telecommunications Society; Editorial Board, Journal of International Society of Telemedicine and eHealth, and Smart Homecare Technology and TeleHealth; coordinator of e-Health Economics, ISFtEH. His current research focuses on economic evaluation of telemedicine and e-Health. He has been consulting the Japanese Government and local governments for implementing telemedicine projects.

mtsui@kobe-kiu.ac.jp