

This study examines the level of clinical sophistication of information technology (IT) in a sample of hospitals in Japan and benchmarks the extent of clinical sophistication in Japan with the findings from similar surveys conducted at different points in time in the State of Iowa in the US and two provinces in Canada. Data for the study were collected using a validated instrument assessing three dimensions of IT sophistication: functional, technological and integration levels. Clinical areas that were assessed include patient management, patient care activities and clinical support activities. The results show that the majority of processes and activities that have been computer-ised in Japan are the basic patient management processes, such as admission, registrations and order entry systems. Telemedicine, expert systems and voice recognition systems for notes transcriptions were only available in less than 5% of the sample hospitals. Overall, there were no differences between the small hospitals and large hospitals in terms of functional and integration sophistication. However, large hospitals had higher technological sophistications than small hospitals. Functional sophistication was higher in Japan than Canada and the US. Technological sophistication in Japan was somewhat better than that of Canada but lower than that of the US. The results demonstrated that there exists substantial room for expanding clinical IT systems in the hospitals in Japan.

Keywords: Hospital information systems, information technology, computerised medical records, system integration, medical informatics, medical technology