# Case study of pharmacist activities in the multidisciplinary practice of outpatient chemotherapy in Japan

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### Abstract

# Objective.

A case study was undertaken to clarify the qualitative picture of pharmacist-physician-nurse interactions in medication-use processes for outpatient chemotherapy operations in a hospital-based setting in Japan.

# Methods.

An on-site observation and time study was performed at the Blood Transfusion Unit of St. Luke's International Hospital during the period July 1-31, 2005. For comparison of the results with practices outside Japan, the observation items of this study were organized in accordance with general steps of medication-use process identified in the American Society of Health-System Pharmacist (ASHP) National Surveys of Pharmacy Practice in Hospital Settings in 2001-2003.

# Results.

In the case study, adoption trends of pharmacy practice in medication-use processes seemed to be at relatively the same level as those at hospitals in the US, when compared to the results of the ASHP National Surveys in 2001-2003 as the key benchmarks. The case study also found that the unique roles of the chemotherapy pharmacist for both product-focused and service-focused responsibilities enabled the outpatient chemotherapy team to adopt the same concepts of continuous quality improvement as those in the Japanese automotive industry, and that multi-skilled personnel development activities for the hospital pharmacist are important to carry out the roles in improving quality of care and reducing costs associated with preventable medication-related problems.

## Conclusion.

The case study suggests that the pharmacist's commitment to medication-use processes for outpatient chemotherapy at the point of care can contribute to improvement in the quality of care and reduction of preventable costs associated with medication-related problems (MRPs) in team care by controlling product flow and information flow from both product-focused and service-focused perspectives.

Key words: Outpatient chemotherapy, kanban, module, QFD, MRPs