

## Contents

### Original Articles

- 39 **Beacon implementations for work process monitoring in health care services**  
*Rojanaporn Tidchai, Vara Varavithya, Chantraporn Keamseng*
- 46 **The use of data mining to investigate abnormal behavior of outpatient drug reimbursement under civil servant medical benefit scheme**  
*Prapai Utama, Eakasit Pacharawongsakda*
- 54 **Knowledge management system based on ontology for assessment of medical laboratory quality**  
*Ronnarong Kaewprasert, Kallaya Jairak*
- 65 **Computerized physician ordering entry system for chemotherapy at Udon Thani Cancer Hospital**  
*Tharathorn Tungkhasamit, Itsaraphong Bamrung*
- 72 **A satisfactory study of using mobile phone application to report annual health checkup results of the Metropolitan Electricity Authority Employees in Samsen district in 2017**  
*Kasem Limrungyuenyong*
- 79 **A solution for operating room time administration by linear programming**  
*Worrawit Pholwiangtham*
- 88 **The development of provincial electronic co-procurement system**  
*Pakorn Toongkhaserirak*