

Title	高齢者介護のためのeHealthサービスモデルにおける価値共創：タイにおける救急医療サービスシステムの事例分析
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Value Co-creation in eHealth Service Model for Elderly Care : A Case of Emergency Medical Service System in Thailand

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Abstract

The trend of aging population in Asian countries is expected to increase at an average of 30% by 2050. An essential mechanism for the well-being of the elderly is healthcare service from physical, mental and social well-being. Healthcare service for elderly people are various ranging from personal care, nursing, life-threatening illness, health consulting, and contingency help. Technologies and innovations have been involved to support the well-being of aging population in an aspect of simplicity with universal design, for example products and equipment used in smart homes, smart cities, or mobile applications. Lack of workforce in healthcare sectors and limited of funding are the main problems in developing countries. To tackle with the problems, technologies and applications need to be properly designed. Besides, right decision making is crucial in order to support diverse requirements of the aging population that are different from country to country in terms of policy, infrastructure, and culture.

Electronic healthcare (eHealth) is an application of information technology in healthcare services that communicates health information in medical team or in healthcare service system. Implications of eHealth and mobile technology for elderly are challenges in technological management and healthcare market for developing countries. Although applications of eHealth have been applied in developed countries for over 10 years; from basic information management to online health service, the applications have not been broadly adopted in health system of Asian developing countries. Emergency medical service (EMS) is a critical healthcare service as it is a part of healthcare giving process ranges from simple cases like physical activity to severe cases relating to life-threatening illness on a 24-hour basis. These services need to provide a flexible application that enables the elderly to communicate their desires with others within a reasonable time. Accordingly, there is a need to identify and develop an eHealth model to support EMS for the elderly in developing countries.

The research objectives are separated into three parts. The first part aims to identify the alternative technological challenges for EMS system to support elderly patients' demands. The second part focuses on healthcare knowledge sharing on the basis of technology acceptance of people. The last part aims to develop a conceptual eHealth service model and infrastructure framework based on value co-creation concept and knowledge sharing in elderly care service system. In terms of research methodology, statistical analysis is used based on secondary data from the World Health Organization (WHO). Systematic reviews are applied to identify the needs of healthcare technology related to aging people. Questionnaire surveys are conducted to identify technology acceptance and perspective of stakeholders and patient in Asian developing countries. Conceptual modeling and framework approaches are adopted to develop eHealth service model and infrastructure framework by enabling healthcare knowledge in service system.

This research identifies the alternative technological challenges for EMS system to support elderly patients' demands and develops a conceptual eHealth service model and infrastructure framework based on value co-creation concept and knowledge sharing in healthcare service system. The findings reveal that knowledge sharing and value co-creation concept involve positively significant factors that influence innovations in healthcare service. The results support service system design that offers e-service in emerging market of mobile technology by integrated resource and value-added in service through co-operation of different levels of technology and consumer groups.

Key words: eHealth, Emergency medical service, Value co-creation concept, Knowledge sharing, Technology acceptance