

# A Pilot Study of Nursing Shift Report information System in one of Taiwan's Regional Teaching Hospital

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## Background/Problem/Objective

Nursing shift reports aim at the successful transfer of information. The old paperwork practice is time-consuming and runs the risk of incomplete documentation and misunderstanding. An insufficient information transfer between nurses could delay necessary treatment, or worse, pose threat to patient safety.

## Methods/Interventions

With the help of nursing and information departments, the shift report system was introduced to the gynecology and pediatrics wards. Questionnaires were designed based on the theories of the Task-Technology Fit and IS Success Model. The survey took place on January 2018 targeting 41 nurses to gather their user experience and evaluation of the system's effects on their work performance.

## Results (of Evaluation)

Smart PLS has been adopted for data analysis. All variables of the average variance extracted exceeded 0.7 and composite reliability reached 0.9, meeting the reliability and validity requirements. The path analysis from task characteristic and technology characteristics to TTF, from TTF to work performance, from information quality and service quality to use satisfaction, from user satisfaction to work performance, were all evident. The model showed an explanatory power of 91%.

## Conclusions

Based on the Innovation Diffusion Theory, the pilot study focused first on the gynecology and pediatrics departments and nursing stations. The results showed that nurses adapted well to the system, felt positive about the quality of information and services, and able to achieve a 100% report completeness rate.

## Relevance to HPH

By assisting the complete transfer of information, the nursing shift report system ensures an uninterrupted around-the-clock patient care and gives doctors a better overview of patient conditions. Nursing efficiency, healthcare quality and patient health are among the benefits of the system.

**Key Words:** Shift report, Information System, Research, Pilot Study