

ASSESSING THE EFFICIENCY OF HOSPITAL PHARMACY SERVICES IN THAI PUBLIC DISTRICT HOSPITALS

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Abstract. The purpose of this study was to assess the efficiency of hospital pharmacy services and to determine the environmental factors affecting pharmacy service efficiency. The technical efficiency of a hospital pharmacy was assessed to evaluate the hospital's ability to use pharmacy manpower in order to produce the maximum output of the pharmacy service. Data Envelopment Analysis (DEA) was used as an efficiency measurement. The two labor inputs were pharmacists and support personnel and the ten outputs were from four pharmacy activities: drug dispensing, drug purchasing and inventory control, patient-oriented activities, and health consumer protection services. This was used to estimate technical efficiency. A Tobit regression model was used to determine the effect of the hospital size, location, input mix of pharmacy staff, working experience of pharmacists at the study hospitals, and use of technology on the pharmacy service efficiency. Data for pharmacy service input and output quantities were obtained from 155 respondents. Nineteen percent were found to have full efficiency with a technical efficiency score of 1.00. Thirty-six percent had a technical efficiency score of 0.80 or above and 27% had a low technical efficiency score (<0.60). The average TE score increased in respect to the hospital size (0.60, 0.71, 0.75, and 0.83 in 10, 30, 60, and 90-120 bed hospitals, respectively). Hospital size and geographic location were significantly associated with pharmacy service efficiency.

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