

ABSTRACT

Health departement is an executor elements that organizes regional autonomy of regional government on the health sector. One of good health carec an be achieved with good medication management. Based on the research, the existing problem in pharmaceutical warehouse of health departement is there an over stock and the drugs not used at all which causing expired date.

The over stock problem in pharmaceutical warehouse of health departement can be controled by probabilistic inventory system Q Model and P Model. Q Model and P Model used to determine the optimum number of drugs for every order, the time to reorder, and finding out the number of drugs safety stock, so that the total inventory cost of health departement can be minimized.

In this research, the Hadley-Within formula is used on Q Model and P Model. Based on the results of actual condition inventory system at Pharmaceutical Warehouse of Health Department total inventory cost is Rp5.871.327.676, while the result of Q Model is Rp 3.910.675.594, and the result of P Model is Rp 3.972.295.885. The calculation of total inventory cost using Q Model result is saving 33% from existing condition, while using P Model result 32%.

Keywords: Inventory, Hadley-Within, Q Model, P Model, Quantity Order, Reorder Point, Safety Stock