

Methods for Reducing Outdating Attributed to Overordering

ABSTRACT

This paper identifies the relationship between overordering and outdating in a hospital blood bank and introduces the usage to order ratio users. New policies called adaptive policies are introduced to minimize the impact of overordering for users with a low usage ratio. Two major policy classifications are considered corresponding to altering or not altering the usage to order ratio. In classification one the FIFO versus LIFO issuing policies were considered. In the second classification double crossmatching and delayed crossmatching policies were considered. The impact of these policies on the patients physician and the operation of the blood bank are discussed.

To test the various policies data was obtained from the obstetrics-gynecology department of a large medical center in Chicago. The analysis was carried out using a digital computer simulation of the blood bank system.