SUPPLY CHAIN MANAGEMENT OF BLOOD BANKS

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SUMMARY

The chapter starts with a strategic overview of the blood banking supply chain. We then proceed to ask and answer questions concerning (i) the blood banking functions that should be performed and at what locations, (ii) which donor areas and transfusion services should be assigned to which community blood centers, (iii) how many community blood centers should be in a region, (iv) where they should be located and (v) how supply and demand should be coordinated. Then the many tactical operational issues involved in collecting blood, producing multiple products, setting and controlling inventory levels, allocating blood to hospitals, delivery to multiple sites, and making optimal decisions about issuing, crossmatching, and crossmatch releasing blood and blood products are presented. The chapter concludes with areas for future research.

KEY WORDS

Supply chains, Blood inventories, Blood bank models