

Case Questions

1. The goal of Mountain View Community Hospital is to provide high-quality, cost-effective health-care services for the surrounding community in a compassionate, caring, and personalized manner. Give some examples of how the use of databases in the hospital might improve health-care quality or contain costs. How else could a well-managed database help the hospital achieve its mission?
2. How can database technology be used to help Mountain View Community Hospital comply with the security standards of the Health Insurance Portability and Accountability Act of 1996 (HIPAA)? HIPAA requires health-care providers to maintain reasonable and appropriate administrative, technical, and physical safeguards to ensure that the integrity, confidentiality, and availability of electronic health information they collect, maintain, use, or transmit is protected. (For more details on HIPAA, visit www.hhs.gov/ocr/privacy.)
3. What are some of the costs and risks of using databases that the hospital must manage carefully?
4. How critical are data quality requirements in the hospital environment? For which applications might quality requirements be more restrictive?
5. At present, Mountain View Community Hospital is using relational database technology. Although this technology is MVCH FIGURE 1-3 Preliminary enterprise data model appropriate for structured data, such as patient or accounting data, it is less well suited to unstructured data, such as graphical data and images. Can you think of some types of data maintained by a hospital that fit this latter category? What types of database technology rather than relational might be better suited to these data types?