PREAMBLE

The first general application area we will explore is medical informatics. The reason for treating it first is that in no other discipline has statistical and data mining applications been applied for a longer time, and it is an area in which analytical results can have such profound effects in both positive and negative directions. We will consider what medical informatics is and how data mining and text mining are related to medical informatics and 3D medical information. We will also discuss some journals and associations in medical informatics and look at an example of a medical informatics study.

WHAT IS MEDICAL INFORMATICS?

In a very simple sense, we might think of the new area of medical informatics as operations in which the computer meets medicine. Medical informatics has at least three areas specific to medical and health care management, research, and delivery. These three general areas may be thought of as (1) things related to a patient/doctor relationship like prescriptions and records, involving the accumulation of considerable data; (2) the area of