

Who are the "right people" to be provided with the "right information and knowledge"? Obviously, the most important people in a health care setting are the patients and, in a certain respect, their informal caregivers such as spouses or other close relatives. The most important groups of people working in health care settings are physicians, nurses, midwives, pharmacists, administrative staff, technical staff, medical information, or health information management staff and managers. Large facilities, such as university medical centers, are managed by a board of directors.

Within each of these stakeholder groups, different needs and demands on the health information system may exist, depending on the role, tasks, and responsibilities (Sect. 1.3). Ward physicians, for example, require different information than physicians working in service units or in a medical office. Patients sometimes need similar information as physicians but in a different form.

2.8 Functions, Processes, and Entity Types in Healthcare Settings

In this book, we want to clearly and unambiguously describe the systems needed to ensure information and knowledge logistics. To do this, we need clear concepts to describe the information and knowledge to be provided, the situation in which it is needed, and the people involved. For this reason, we introduce the concepts of entity, entity type, function, process, and role in this section.

Entities are excerpts of the real or conceivable world.

Think back to the "Russo example" from Sect. 1.4. After his stay in the hospital, Mr. Russo's GP Dr. Andersson receives discharge letters from both Ploetzberg Hospital and the Kreikebohm Rehabilitation Centre. The "patient Mr. Russo" and the "discharge letter for Mr. Russo from 2020-08-15" are examples of entities.

An entity type is the set of virtual or physical entities that have certain properties in common (e.g., "discharge letter" or "patient").

Entity types form a "unit of thought" when talking about similar entities. Thus, both the discharge letter for Mr. Russo and a discharge letter for another patient, Mrs. Smith, belong to the same entity type "discharge letter" and share the same properties such as sending date, author, and recipient.

For the sake of simplicity, we sometimes take entity types as representatives of the covered entities and their data. If, during certain information-processing activities (e.g., admitting patients), data on entities (e.g., name of patients' hometown) is used and interpreted, we simply say that the entity type "patient" is used during administrative admission of a patient. In this sense, the entity type "discharge letter"