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LINKING PRODUCT INFORMATION WITH CASE DOCUMENTATION

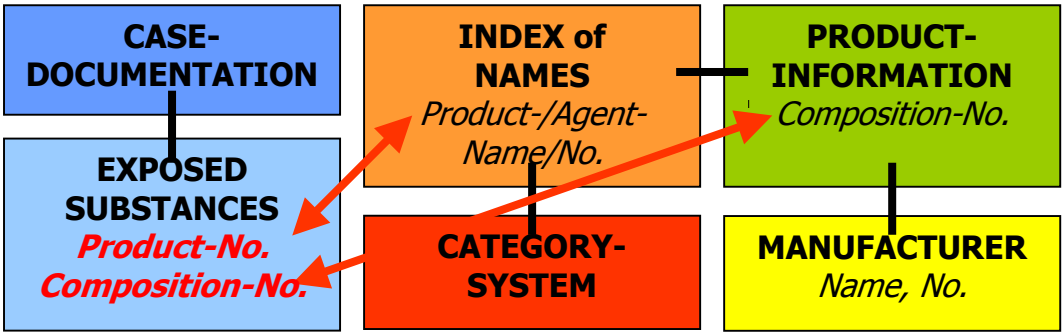
A Main Tasks of Poisons Centres and Structure of Databases

The main tasks of German Poisons Centres (PCs) are fixed in the Chemikalien-Gesetz §16e. Two of the main points are:

A) Advice and treatment of poisoned patients as well as
B) Documentation and evaluation of cases.

It is necessary to perform research on substance names and on product names in order to perform competent assessment of the possible course of the poisoning and to perform high quality advice for the treatment of poisoned patients on the one hand, as well as the documentation of the substances und products exposed to the patient on the other hand.
The names of the products and substances as well as obvious numbers (e.g.: UBA-No.) take a crucial role in the daily work of a PC.
The development of computerized databases for the request of information and for the documentation has been established as an indispensable part for the accomplishment of these main tasks.

Serving as a link between both jobs, the INDEX of NAMES plays a very important role.
This INDEX of NAMES has to be combined with a CATEGORY-SYSTEM, which is able to build up groups of agents according to its application. This facilitates the work with the immense variety of product and agent names.
Furthermore, the MANUFACTURER, being the responsible author of the product information including the ingredients, has an integral part (see figure below).



In both areas (acquisition of information and case-documentation) the following data are of important use:

1. Name and non-ambiguous number of the product
2. Non-ambiguous number of the composition (e.g.: UBA-No.)
3. Ingredients of the product
4. Name and non-ambiguous number of the manufacturer (ILN-Code, resp. BgVV-No.)
5. Application-category of the product.

Two non-ambiguous numbers - one number for the name of the product and one number for the composition of the product - enable the link between case-documentation and product-information.

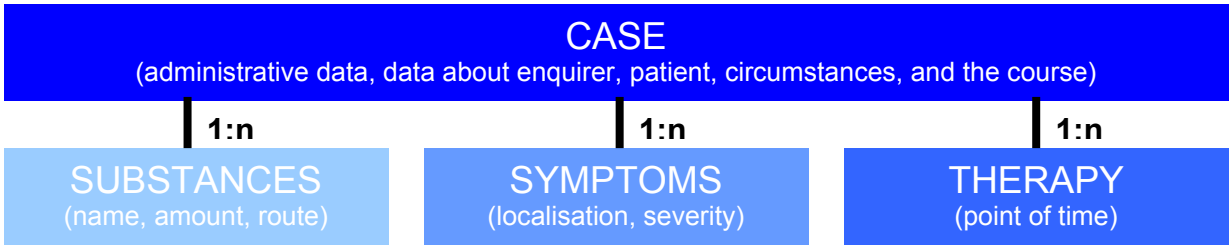
The starting point of the search can be at any point indexed above, depending on the inquiry within the scope of the information-research for the advice of a poisoned patient on the one hand, respectively for the data input during the documentation of cases on the other hand. A relational database system enables complex connections of different information units.

B Requirements of modern case documentation

Possible inquiries to the data pooling of poisonings is widely spread. Subsequently, you can find some typical requirements to the database of cases:

1. Forensic documentation of the telephone call
2. Generation of data for the management of a PC
3. Collection of epidemiological data about poisonings
4. Data for the risk assessment of substance categories
5. Clinical evaluation of the course of poisonings with specific substances
6. Data for the quality control of the activity of the PC

The complexity of the inquiry must result in the complexity of the architecture of the database.
The following figure illustrates a useful structural design of a database for the collection of cases.



C Exemplary representation of the link between product information and case documentation with the documentation system ADAM

Within the scope of the TDI-project, the PC of Mainz made it its business to combine the existing documentation system so called ADAM© with the presently developed database of the TDI-project.
The documentation system ADAM© consists of three modules (Administration-, Documentation- and Analysis-Module). Since the routine start of the system in 1995, more than 160.000 cases including follow up information have been entered into the database. The input of data is performed by the advisor of the case in more than 80% of the cases. The median of the latency period between consultation and data entry is 60 minutes. At this time, the system is in use at four German PCs.

As an example of product names, substances and product categories the link between both systems will be demonstrated by these four examples:

1. Documentation of a case with a known product
2. Documentation of a case with a new product
3. Evaluation of cases within one product category
4. Evaluation of cases within one substance.

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