

# **GTDS As A Tool For Integrated Hospital Cancer Registries**

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Since the beginning of the 1990ies a tumour documentation system, the so-called Gießener Tumordokumentationssystem (GTDS), has been developed at the Institute of Medical Informatics in Gießen. The development was originally initiated and funded by the Federal Ministry of Health. The requirements had been defined in cooperation with many experts of cancer registries. It is based on the German standard for tumour documentation "Basisdokumentation für Tumorkranke". Among other features like providing a rather detailed picture of the course of disease, this standard promotes a clinically integrated documentation which means on the one hand that data should be available for the support of patient care and on the other hand that data should also be entered during the process of care.

At present GTDS is in use in more than 40 hospital cancer registries in most of the German states. In some states like Brandenburg, Mecklenburg-Vorpommern and Sachsen, hospital cancer registries work such successfully that they contribute more than 90% of data for the population based cancer registry. Public funding has been replaced by service contracts with the hospital cancer registries.

An important success factor to motivate clinicians to report to cancer registries is to deliver a continuous feedback about data in the registry. GTDS provides an analysis tool that aggregates the most important variables spread over numerous tables into a set of few tables that are optimized for further processing in statistics software. For example extensive reports have been developed based on these tables revealing possible deficiencies in early detection and treatment of cancer.

Individual patient care can be supported sending out reminders to follow-up examinations according to national or regionally adapted guidelines. Overview reports based on the data in the registry are widely used to provide all physicians with an easy to read comprehensive information about all important events during the course of disease.

The tightest integration can be achieved when GTDS is used directly by clinicians. In oncologically specialised units like day clinics GTDS supports routine work like calculation of treatment plans and medical report writing. Data entry is reduced to a minimum since many data can be imported from hospital information systems. Beneath the benefit of not having to re-enter such data manually, interfaces to billing systems or pathology systems are an important means to detect possibly missing cases or to gain follow-up information.