

Documentation and Benchmarking in Geriatric Acute Care Units – Indicators and Implementation Concept

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Purpose

In an ageing population, chronic conditions and multimorbidity demand quality assurance in the care of elderly patients. Benchmarking provides feedback and continuous control of sustainability and amelioration of process and outcome quality in medical care.

A benchmarking system for multidisciplinary geriatric care units - containing the development of process and outcome based quality indicators and an implementation concept using the online application Healthgate BARS - was designed.

Materials and Methods

Following the descriptions of Borchelt et al. (1999) for GEMIDAS and Trögner et al. (2006) for GiB-DAT the building up of an Austrian database for benchmarking purposes was prepared. To create a scientifically relevant data set a literature review was conducted and a set of relevant geriatric parameters was discussed by a group of experts. The required dataset is collected by the participating centres on the day of admission and discharge, respectively.

To build the database the existing web application Healthgate BARS (Benchmarking And Reporting Service) was extended by creating a new module for geriatrics. This application is already in use for quality management in diabetes, hypertension and hepatitis C and contains more than 220.000 data sets from centres in Germany and Austria. It allows documentation either on paper or via electronic data entry form (Fig. 1).

Healthgate BARS is the basis for benchmarking, reporting and scientific data analyses. Participating centres can produce queries on demand for analyses regarding structure, process and outcome quality (Fig. 2).

Results

The expert panel agreed upon a set of parameters for structured documentation of scientifically relevant process and outcome based quality indicators resulting in a documentation sheet (Fig. 3).

It is subdivided into the following sections:

- Basic patient data
- Hospitalisation criteria
- Diagnostic interventions and diagnosis
- Therapeutic interventions
- Discharge

The instruments for the assessment of functional deficits (e.g. Barthel Index, MMSE, GDS) are grouped in the basic geriatric assessment. To record the patient's main diagnosis ICD-10 is used. In addition, functional disorders, main complications and required diagnostic steps can be mapped. Analyses of the length of stay and changes in certain parameters like Barthel Index over the treatment period are possible due to the dual documentation on the day of hospitalization and discharge, respectively.

Figure 3: Documentation sheet

Figure 1: Example of electronic data entry form for diabetes

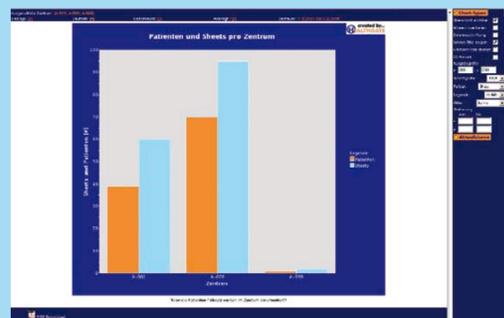


Figure 2: Example of a user's query for diabetes

Conclusion

Following the tradition of GEMIDAS and GiB-DAT, a system for quality assurance in the care of geriatric patients is being prepared by expanding the approved web application Healthgate BARS, offering a benchmarking and reporting system which is accessible independent of time and location with minimum software and hardware requirements.

This technology is capable to provide a nation-wide benchmarking system under standardised conditions.

References

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