The result matters - Quality measurements by means of quality registries

BACKGROUND

The Austrian Public Health Institute (GÖG) develops and manages currently 7 quality outcome registries.

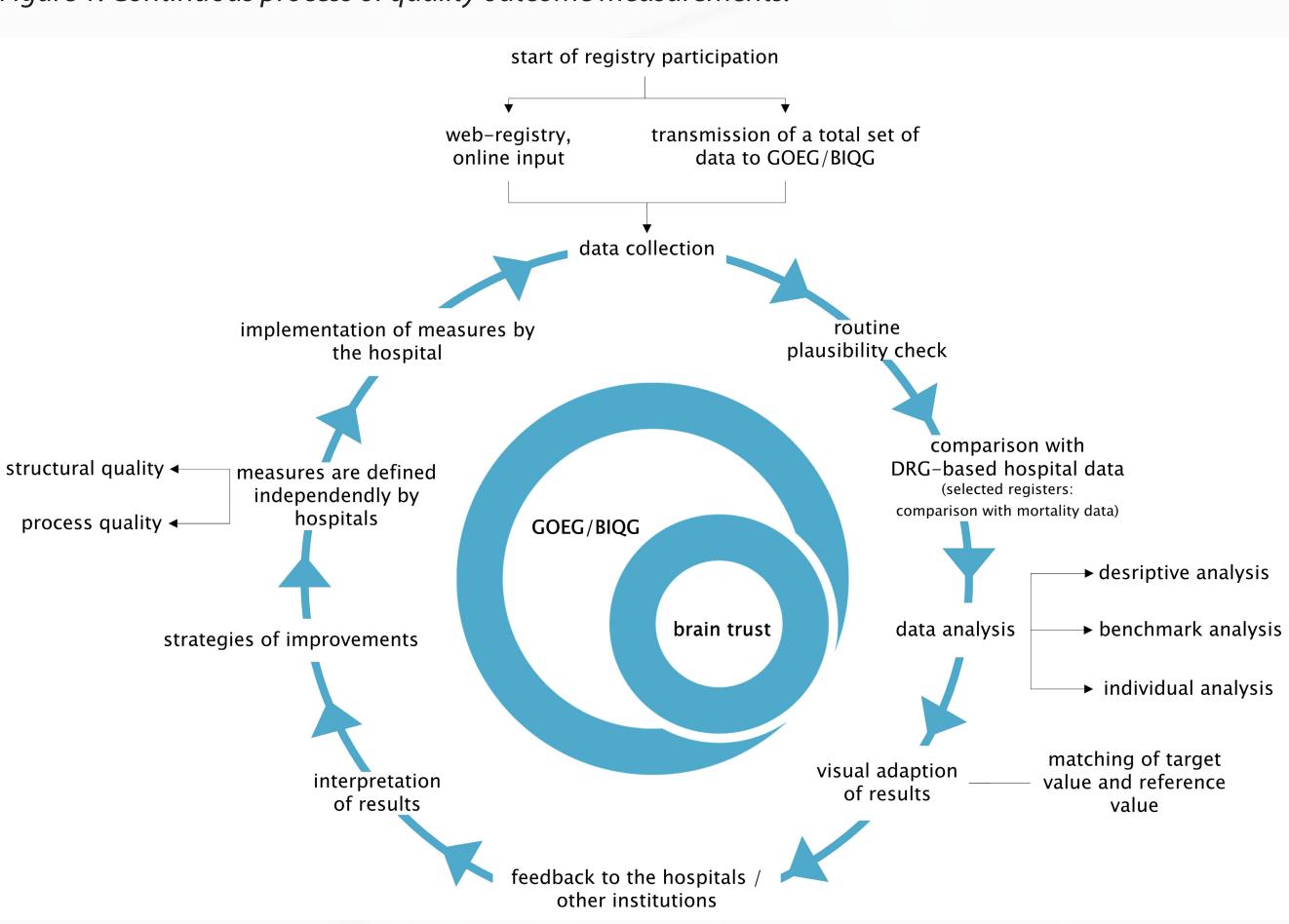
Quality outcome registries aim to provide a comparative description of care received and of treatment results. They are also a useful tool to identify potential areas for future activities related to quality improvement and patient safety. The maintenance of the registries is required by law [1; 2; 3].

MATERIALS AND METHODS

Data are collected either via a web-application or decentrally in the hospitals (periodical transmission). Data of almost all registries undergo routine plausibility checks, comparing them with DRG (Diagnosis-related groups) -based hospital data and mortality data provided by Statistic Austria. Descriptive- and benchmark analyses are carried out regularly by the Austrian Public Health Institute.

Figure 1 shows the process of quality outcome measurements.

Figure 1: Continuous process of quality outcome measurements.



Source: Austrian Public Health Institute

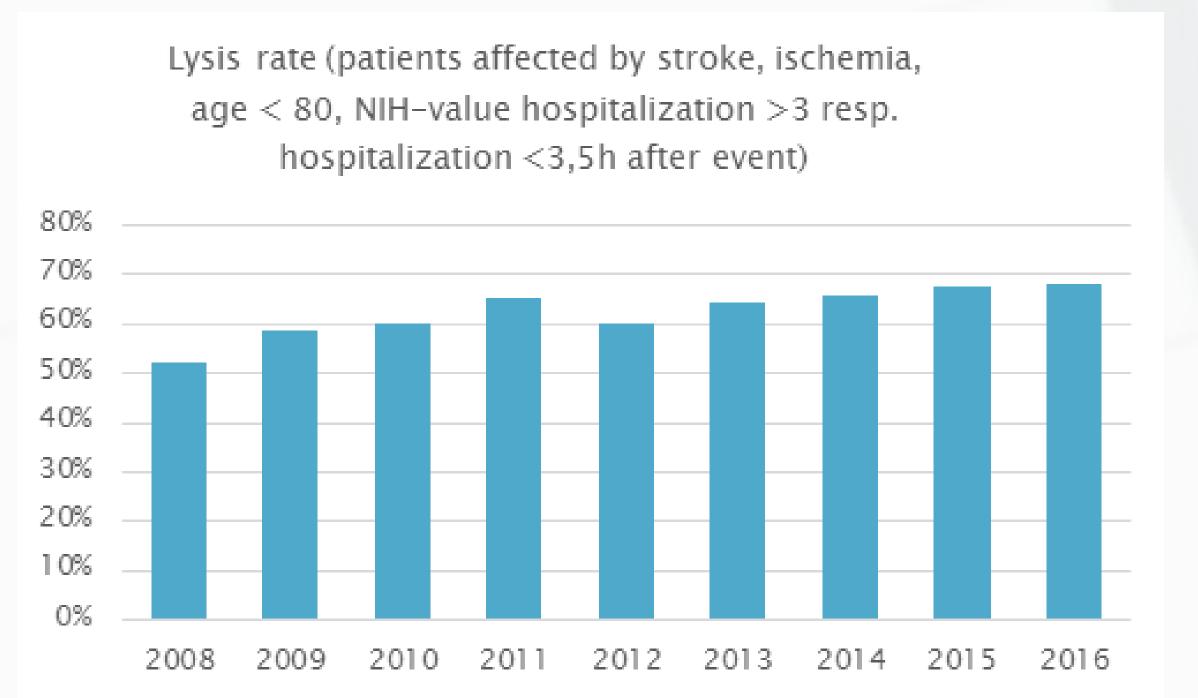
RESULTS

All participating hospitals compare their own results to the national average and to other hospitals on a pseudonymised basis. As an outcome of this process hospitals define their own measures to improve quality of treatment and care (e.g. comprehensive training concerning surgical techniques, optimization of structures in hospitals).

A positive aspect concerning patient safety is, that better quality leads e. g. to fewer complications and lower mortality rates.

Figure 2 shows exemplary a positive evaluation result: the percentage of Lysis rate concerning selected patients increased over the past years. Results are not open to the public, but shared only with participating hospitals and clients (e.g. Ministry of health).

Figure 2: Lysis rate (patients affected by stroke, ischemia, age < 80, NIH-value hospitalization > 3 resp. hospitalization <3,5h after event)



Source: Austrian Public Health Institute

CONCLUSIONS

Registries can serve as a comprehensive and high quality nationwide database, describing the treatment and care of patients in hospitals. With a standardised quality improvement process and a high participation rate, quality outcome registries contribute significantly to nation-wide quality assurance of medical therapy and especially to the improvement of patient safety.

Table 1 gives an overview about all 7 quality outcome registries.

Table 1: Quality outcome registries currently maintained by the Austrian Public Health Institute.

Registries	Coverage	Selected Indicators (examples)
Stroke Unit Registry	35 of 37 Austrian Stroke Units	 NIH Stroke Scale time passed between event & hospitalization
Quality measurement of hip & knee endoprosthesis	all Austrian acute care hospitals	revision countcomplications
Adult cardiac surgery Registry	9 of 9 Austrian cardiac surgeries	standardized mortality ratepostoperative complications
Register for pacemakers, ICD and loop recorders	mandatory data transfer according to the Medical Devices Act [3]	reasons for explantationcomplications
Neonatology Outcome – Registry	currently 22 acute care hospitals and nearly 5.400 data sets	 cerebral palsy per birth- weight group mortality
Registry for radical cystectomies	shut down; 24 acute care hospitals and nearly 600 data sets	all radical cystectomies;re-hospitalisation
Quality assurance in vascular surgery	currently developed	complicationsmortality

Source: Austrian Public Health Institute

REFERENCES

[1] Bundes- Zielsteuerungsvertrag

[2] Bundesgesetz über die Gesundheit Österreich GmbH (GÖGG)

[3] Bundesgesetz betreffend Medizinprodukte (Medizinproduktegesetz – MPG)

KEYWORDS

Quality measurements; quality registries; nationwide database; hospital quality improvement; patient safety

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