ANQ Quality Measurements in Hospitals and Clinics - A pioneering Swiss achievement

A contribution to the National Report on Quality and Security in Swiss Healthcare

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Summary:

The Swiss National Association for Quality Development in Hospitals and Clinics (ANQ) coordinates and conducts quality measurements in acute somatics, rehabilitation and psychiatry. The results permit transparent and nationwide comparisons. Based on these results, hospitals and clinics can specifically develop measures for improvement of their quality.

ANQ members include the Spitalverband H+, santésuisse, curafutura, the Swiss social insurances, the cantons, the principality of Liechtenstein and the Swiss health directors' conference. Thus, all payers and service providers of Swiss health care are represented in the ANQ. The association's work is based on the health insurance act (Krankenversicherungsgesetz; KVG); the ANQ is not profit-oriented.

The ANQ does internationally pioneering work: The partnership-based agreements, the consensus-oriented cooperation of all tariff partners with a bottom-up approach and the mandatory nationally comparative quality measurements that are consistent throughout the country and being published transparently are an international success and serve as a positive example.

Opportunities: The ANQ quality measurements using scientifically accepted survey methods permit fair comparisons between the institutions within the meaning of best practices. They raise awareness among the institutions for quality subjects and serve the payers (cantons/insurers) as indicators for the dialogue with the service providers (hospitals/clinics).

Thresholds: The ANQ quality indicators were chosen in order to promote quality development - the measurement results do not reflect the overall quality of an institution. Accordingly, they are neither suitable for quality-dependent remuneration (pay for performance) nor for sanctions against institutions with bad measurement results or ranking/hospital classifications.

The future challenges lie in the extension of the quality measurement into the outpatient area of hospitals, financing of inpatient services in connection with development of outpatient before inpatient, further development of the measuring plan and timely communication of the ANQ measurement results. Optimisation potential is present in intensification of the coordination and networking between the parties and in responding rapidly to health-political developments.

1) Swiss National Association for Quality Development in Hospitals and Clinics (ANQ)

Corner points of the ANQ

The Swiss National Association for Quality Development in Hospitals and Clinics (ANQ) coordinates and conducts quality measurements in acute somatics, rehabilitation and psychiatry. The results permit transparent and nationwide comparisons. Based on these results, hospitals and clinics can specifically develop measures for improvement of their quality. ANQ members include the Spitalverband H+, santésuisse, curafutura, the Swiss social insurances, the cantons, the principality of Liechtenstein and the Swiss health directors' conference. Thus, all payers and service providers of Swiss health care are represented in the ANQ.

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Initiative of the healthcare area

The ANQ activities are based on the Swiss health insurance act (Krankenversicherungsgesetz; KVG) from 1994 which stipulates that the service providers (hospitals and clinics) and the payers (insurers and cantons) incorporate contractually agreed quality assurance procedures including periodic performance reviews. Hospital and clinic comparisons must also be carried out, in particular with regard to costs and the quality of the results.

As a consequence of the KVG revision at the time, the Spitalverband H+, the industry association of the health insurances santésuisse, all Swiss cantons and the Swiss social insurers (accident, military and disability insurance) founded the ANQ association in 2009. The main objective of the association was defined as consistent implementation of outcome measurements in the inpatient area of acute somatics, psychiatry and rehabilitation. In early 2018, the health insurance curafutura joined the association.

Efficient structures

The most important association bodies of the ANQ are the members' assembly and the board. As the highest committee, the *members' assembly* approves, among others, the strategy, the budget and the annual statement and elects the board members.

The *board* manages the business of the ANQ. It has equal representation and consists of twelve persons: six represent the hospitals/clinics, three the cantons, three the insurances. One representative of the Swiss Federal Office for Health (BAG) joins as an observer without voting right. The board develops the strategy. In particular, it specifies rules on transparency and handling of data. Furthermore, it determines the quality indicators and measurement tools. When selecting them, it ensures internationally and scientifically accepted survey methods so that the results can be compared to those from other countries.

The *office* is subject to the board and supports it. The office can rely on the expertise and experience of quality committees and ANQ expert groups. The *quality committees* are formed according to ANQ subject areas or interdisciplinary according to measuring subjects, and help implement the measurements and develop them further. *ANQ expert groups* reinforce current questions of ongoing quality measurements and intensely deal with central aspects.

Quality measurements, communication and support as main tasks

The ANQ coordinates and implements quality measurements in inpatient acute somatics, rehabilitation and psychiatry based on the ANQ measuring plan and the quality indicators defined in it. It communicates the measurement results to the ANQ partners and the public. In its activities, the ANQ is committed to the greatest scientific care and transparency.

The ANQ regularly supports the persons responsible in the hospitals and clinics in the interpretation and use of the data by trainings and topic-specific workshops. The ANQ symposium Q-Day enables technical exchange within the meaning of best practice. Many representatives of the service providers and payers use the practice-oriented discussion and networking platform around the ANQ measurements.

Financing through members and annual contributions

The expenses for the *ANQ association structure* (office, committees, member administration) are financed by the annual membership contribution.

The *measurement and evaluation costs of the ANQ* are financed via the annual contributions of the hospitals and clinics. They depend on the number of inpatient stays in the respective area (in 2017, per discharge: acute somatics 2.70 CHF, psychiatry 9.88 CHF, rehabilitation 11.30 CHF). In return, the hospitals and clinics receive the measurement tools, the measuring logistics, the evaluated results and the national comparative reports.

The ANQ is not profit-oriented.

2) ANQ quality measurements

ANQ measuring plan and quality indicators

The ANQ compiles concepts for measuring result-relevant national quality indicators in the three ANQ subject areas of inpatient acute somatics, psychiatry and rehabilitation on the order of the tariff partners (Spitalverband H+, santésuisse, curafutura, the Swiss social insurances, the cantons, the principality of Liechtenstein and the Swiss health directors' conference). The quality indicators are specified in the ANQ measuring plan, which is part of the national quality contract.

ANQ bodies with experts from hospitals, clinics and ANQ partner organisations continually develop the measuring plan. New quality indicators must be particularly relevant, clearly comprehensible, practically useful and suitable for fair quality comparisons between the institutions according to the transparently published criteria catalogue[1]. Experiences and feedback from the hospitals and clinics are considered in the best manner possible. The measuring plan is widely supported and nationally accepted thanks to this procedure.

The ANQ pursues a practical approach: The measurement results are to directly benefit the patient and the attending hospital staff. Another central item is that the institutions are able to use the data collected for quality measurements as a basis for the increase of their quality.

The ANQ focuses on measuring selected and important quality aspects. The overall quality of an institution therefore cannot be assessed based on the ANQ measurement results.

The currently valid ANQ measuring plan indicating the quality indicators, methods and measurement tools per ANQ subject area is enclosed.

Swiss pioneering achievement

The most notable features

The ANQ has done a lot of development and conviction work in the ten years since its founding. Its achievements to date are internationally pioneering: The partnership-based agreements, the consensus-oriented cooperation of all tariff partners with a bottom-up approach and the mandatory nationally comparative quality measurements that are consistent throughout the country and being published transparently are an international success and serve as a positive example.

National quality contract – a partnership-based agreement

The national quality contract from 2011 forms the basis for successful implementation of consistent quality measurements in the three ANQ subject areas. All Swiss hospitals and clinics, all cantons and all insurances acceded to this contract. They thus committed to participating in all ANQ measurements and financing them. Thereby, they also agreed to careful evaluation and transparent publication of the data. Implementation of countrywide and consistent quality measurements in hospitals and clinics is unique in the international context.

[1] Cf. Criteria catalogue for new measuring subjects respectively quality indicators (document in German)

Partners in constant dialogue

All tariff partners are continually in dialogue via the ANQ. This raises awareness for some different opinions and promotes a solution-oriented manner of action across the individual stakeholders and the different interests.

Consensus-oriented procedures lead to high acceptance

With the national quality contract, all important partners of healthcare, without exception, commit to the target of quality measurement and quality development, and to a shared approach. This is a basic prerequisite for a national measuring system. Therefore, not only the statutory specifications are implemented, but targeted and pragmatic solutions are jointly developed, implemented and supported additionally.

The procedure with equal say in the implementation of the measurements and the publication of results offers better prospects of success than regulations passed by the authorities. For example, the evaluation and publication concepts for the individual indicators are developed under inclusion of the basis and reviewed by the ANQ partners. This shared consensus-oriented procedure in the meaning of a bottom-up approach, coupled with as much expert knowledge as possible, creates a high acceptance of the developed solutions among all parties.

Transparent publication with fair hospital and clinic comparisons

ANQ mandates independent organisations, usually institutes of universities or colleges, with processing and evaluation of the collected data. They evaluate the results scientifically and according to international standards. The data are subjected to a risk adjustment. Hospitals and clinics may differ considerably in their service offer, their infrastructures and their patient collectives. Risk adjustment can consider these differences and render the measurement results comparable. Since reality never can be mapped entirely, the ANQ always reminds of such differences and possible interpretation freedoms when communicating measurement results.

Fairness is not only an absolute requirement in data evaluation, but also in communication of the measurement results. They are presented in a graphically comprehensible manner, while reading aids and references to opportunities/risks of the ANQ measurements contribute to a correct interpretation of the results. The ANQ does not highlight any hospitals or clinics, neither positively nor negatively, since accessibility of the measurement results to the public promotes competition anyway.

The ANQ welcomes it if the results of the quality measurements are publicly discussed – but this should be done factually and according to the motto of "dialogue instead of pillory".

Opportunities and limits

Opportunities: Quality development, raising awareness and dialogue

The indicators selected by the ANQ are primarily suitable for *quality development* in Swiss hospitals and clinics. They supply the basics in order to trigger and implement targeted improvement measures in the institutions.

They permit *fair comparison of the results* between the individual institutions with respect to a specific indicator. Publication of the measurement results per hospital or clinic promotes competition among each other. Thanks to the transparent publication, it is now possible to make differentiated comparisons and to learn from each other – in the meaning of *benchmarking and best practices*. The nationwide consistent measurements are to permit, as far as possible, *international comparison* and corresponding benchmarking as well.

The quality measurements *raise awareness* among the persons responsible in the hospitals and clinics for the respective quality subjects. This triggers learning processes. The individual measurement results offer hospitals important internal argumentation aids, e.g. for investment in quality development, for process analyses, trainings, etc.

The payers (cantons and insurances) use the ANQ quality measurements as indicators for the *dialogue* with the service providers (hospitals and clinics).

Thresholds: Pay for performance, sanctions and hospital rankings

The ANQ quality indicators were chosen explicitly in order to promote quality development - the measurement results do not reflect the overall quality of an institution. Accordingly, they are neither suitable for *quality-dependent remuneration* (pay for performance) nor for *sanctions* against institutions with bad measurement results. The focus of the tariff partners should be mostly on whether the service providers actually use the ANQ data in their quality management.

For the same reasons, the ANQ measurement results are also not suitable for rankings or hospital classifications, which are intended to serve patients as a basis for decision-making when choosing a hospital: the ANQ measurements measure only the quality of a very specific indicator and not the overall quality. The ANQ disapproves of unauthorised, reduced or improper use of the measurement results by third parties and attentively monitors the development in the field of hospital search and comparison portals.

Basics of quality development in institutions

The responsibility for derivation, development and implementation of quality development measures based on the ANQ measurement results is deliberately kept with the hospitals and clinics. They know their operational processes best and are able to efficiently and specifically determine where they need to start improvements.

The ANQ is not legitimated to take sanctions against the service providers or to apply any controlling mechanisms. The payers (cantons and insurances) are responsible for quality control and possible interventions.

3) A lot has been achieved in ten years

Development and conviction work

In the ten years of its existence, the ANQ has done plenty of development and conviction work: The structures of the ANQ with many different partners have been created and the demanding question of financing of the association and quality measurement has been answered. The core of this work is the national quality contract, in which the shared understanding is recorded and the cooperation is stipulated. Initial resistances among the hospitals and clinics have mostly been overcome. Today, the hospitals and clinics share the intention of the nationally comparing, transparent ANQ measurements and are motivated to use the data gained for patient treatment and for quality development.

Creation and further development of the ANQ measuring plan

The ANQ measuring plan was developed in a consensus procedure among all ANQ partners. Implementation of the measuring concepts took place gradually between the three subject areas. The farthest progress today is found in acute somatics, which has been implementing and developing the measuring concepts since 2011 already. In psychiatry, the measuring concepts have been implemented since mid-2012 and in rehabilitation since early 2013. As of the end of 2018, the measurement results from rehabilitation have first been transparently published - so that measurement results from all three areas on hospital/clinic level are now available.

Improvement of data quality

Good data quality is a prerequisite for the measurement results being published transparently, i.e. including hospital and clinic names. The data quality has improved in all three specific areas across the years. The increasing experience of the hospitals and clinics in data collection, clinic-specific reports on data quality, optimisation of the processes and offered ANQ trainings for quality managers contribute to this development.

Outcome: 2009 to 2019

As of today, 16 nationwide measurements across all three ANQ subject areas are comparatively evaluated, with 12 of them transparently per hospital/clinic. The most important results are summarised below. Comparisons with the prior year are not possible everywhere for various reasons (adjustments in the measurement tools, insufficient data quality, first transparent publication).

Outcome inpatient acute somatics:

- Acute somatics have measured *patient satisfaction* since 2011, using short questionnaires on the satisfaction with relevant core areas. The results from 2011 to 2017 show a consistently high patient satisfaction across all survey items and across all years.
- The measurement of *postsurgical wound infections* in now 12 different types of intervention has been performed by Swissnoso, national centre for infection prevention, on the order of the ANQ since 2009. Since the beginning of the transparent publication in 2011, the following infection rates reduced statistically significantly: Appendectomy (removal of the appendix), elective hip joint prosthesis, hernia surgery (inguinal hernia surgery), cardiac surgery/all interventions, laminectomies with and without implant (spinal surgeries), stomach bypass surgeries. Rectum surgery, in contrast, showed a significant increase of the infection rate. Hospital infections, in particular postsurgical wound infections, are generally connected to the service quality of hospitals and clinics – due to which transparent publication is of great interest for the population and for the media.
- Since 2011, the ANQ has been measuring the *potentially avoidable rehospitalisations (readmissions);* since 2017, it has published the rates of the individual acute hospitals in a transparent manner. In 32% of the hospitals/clinics (basis: Federal Statistical Office data year 2016 with publication 2018), there were more readmissions than would have been expected based on the patient mix. It must be observed that potentially avoidable readmissions can only be influenced within limits by the hospitals; accordingly, a conclusion to treatment quality in the hospital is only partially possible. The rate of *potentially avoidable re-surgeries* is not disclosed for method-related reasons.
- Data on *falls and decubitus ulcers (bedsores)* is collected once per year. Among adults, the total decubitus ulcer rate has remained relatively stable for several years; it is at about 4%. The fall rate among adults also remains virtually stable across the year; it was 3.8% in 2017. Among children, a clear and significant reduction of the total decubitus ulcer rate has been found since the measurements began: Between 2013 and 2017, it reduced significantly and continually from about 15% to about 7%. These results show that the hospitals became strongly aware of the decubitus ulcer risk in children in the last years.
- Since September 2012, data on implanted *hip and knee prostheses* has been recorded in the *implant register SIRIS*. Since inclusion of the register in the ANQ measuring plan, all hospitals and clinics have been obligated to record hip and knee implants in the register. From 2012 to the end of 2016, the register has consistently documented more than 162,000 hip and knee prostheses (primary and revision surgeries). At the end of 2016, SIRIS achieved a participation ratio of 96%. Specific statements on long-term behaviour and function duration of the implants will not be possible before the register has been operated for at least ten years. The same applies to possible quality comparisons.
- Recording of the *spinal implants* is to be included in the measuring plan in future – the corresponding development work and implementation plans are underway.

Outcome inpatient psychiatry:

- In psychiatry, *patient satisfaction* has been consistently measured nationwide since 2017. The first transparent publication will take place in 2019, based on the data from 2018.
- The *symptom burden* has been measured since mid-2012 in adult psychiatry and since mid-2013 in child and youth psychiatry. These ANQ measurements with self- and third-party assessment document that the psychiatric treatment reduces the symptom burden among patients between the admission and discharge. The load values at admission have slightly increased across the years (this means, the patients are increasingly burdened a little more at admission), but the psychiatric treatment also has been able to reduce the symptom burden more strongly by discharge over time. All in all, the results confirm that the clinics have a high treatment quality.
- Since mid-2013, the proportion of freedom restricting measures *(Freiheitsbeschränkende Massnahmen; FM)* has been recorded in adult psychiatry and child and adolescent psychiatry. Progress across the years shows a continuous slight increase of the share in cases with at least one FM in the total number of cases in both areas – we consider this due to improved documentation in the first years. In 2017, adult psychiatry showed the first slight reduction. These figures must be assessed under consideration that fewer FM does not necessarily equal higher quality, since the application of FM can be very different in practice. In clinics that use more FM than others, they may be applied for shorter periods than in those that use fewer FM. This depends on the individual clinic concepts and patient collectives. Direct clinic comparisons therefore are not possible.

Outcome inpatient rehabilitation:

- Rehabilitation has measured *patient satisfaction* since 2013, using short questionnaires on the satisfaction with relevant core areas. Evaluation of the results from 2013 to 2017 shows a positive overall image: Patient satisfaction is relatively stable on a very high level across the years.
- According to the measuring plan for rehabilitation, different methods and measurement tools are used (*documentation of participation target and assessment of target achievement, function in everyday activities, physical performance capacity, quality of life, general health status*) depending on rehabilitation area (musculoskeletal, neurological, other, cardiac, pulmonary rehabilitation). The indicators are collected for every patient both at admission to rehabilitation and at discharge from it. The difference measures treatment success. In November 2018, the results measured in rehabilitation were first published transparently based on the data measured in 2016. The evaluations showed that all clinics achieved an average improvement of function in everyday activities, performance capacity and quality of life, as well as the general health status, between admission to and discharge from rehabilitation.

4) Future challenges and potential for optimisation

The future challenges of the ANQ are diverse:

- *Expansion of quality measurement into the outpatient hospital area:* ANQ quality measurements are focused on the inpatient area only at the moment. In the medium- and long-term, measuring indicators for the outpatient hospital area are to be defined and included in the ANQ measuring plan.
- *New financing of the inpatient performance in connection with development of outpatient before inpatient:* The ANQ measurements are calculated via annual contributions of hospitals and clinics, based on the number of inpatient discharges. With development of "outpatient before inpatient" (easier cases are increasingly treated outpatient), the annual contributions for the ANQ are dropping. Financing of the ANQ quality measurements must be adjusted accordingly.
- *Further development of the current measurement plan:* The ANQ and its expert bodies continually check how the measuring plan can be optimised and effectively developed further. The three subject areas acute somatics, psychiatry and rehabilitation currently proceeded independently of each other. One imaginable development is increasingly targeted at patient-oriented result measurement (alignment with the increase of well-being from the patient's point of view).
- *Faster communication of the ANQ measurement results:* the elaborated processes of data collection until transparent publication and the many interfaces between the partners and persons involved lead to the measurement results being ready for publication only one or two years after completion of data collection at the moment. The tendency is towards reduction of the overall duration.

The ANQ currently finds optimisation potential mostly in the following areas:

- *Intensifying cooperation and networking:* Cooperation and exchange between all actors in healthcare is good, but has space for further intensification.
- *Faster political action:* Healthcare is changing, many health-political questions influence the activities of the ANQ. It is desirable to quickly deal with the developments with suitable structures.

Other current developments in healthcare with implications for the ANQ activities:

- Ongoing KVG revision on quality and economic efficiency
- Introduction and further development of SwissDRG, TARPSY, ST Reha and outpatient tariff systems

Further information on the ANQ, including detailed ANQ measurement results:
www.anq.ch

There are no potential conflicts of interest for the ANQ.

ANNEX

ANQ measuring plan with quality indicators

The ANQ measuring plan (as of January 2019) shows the quality indicators, methods and measurement tools defined for each specific area.

Acute care

Indicator	Method	Tool
Adults		
Patient satisfaction	Survey	ANQ short questionnaire
Wound infection after surgeries	Swissnoso programme	SSI surveillance module
Potentially avoidable readmissions	SQLape	Data from FSO medical statistics
Falls and pressure ulcers	Prevalence review	LPZ International
Knee and hip implants	Registration	SIRIS implant register
Spinal implants*	Registration	SIRIS implant register
Children		
Patient satisfaction	Parent survey	ANQ short questionnaire
Wound infection after surgeries Appendectomies	Swissnoso programme	SSI surveillance module

* Undergoing clarification/in progress

Psychiatry

Indicator	Method	Tool
Adults		
Patient satisfaction	Survey	ANQ short questionnaire
Symptom severity	Data collection method: self-assessed Data collection method: externally assessed	BSCL HoNOS
Coercive measures	Documentation	EFM
Children and adolescents		
Symptom severity	Data collection method: self-assessed Data collection method: externally assessed	HoNOSCA-SA HoNOSCA
Coercive measures	Documentation	EFM-KJP

Rehabilitation

Indicator	Method	Tool
Adults		
All areas of rehabilitation (Module 1)		
Patient satisfaction	Survey: self-assessed	ANQ short questionnaire
Musculoskeletal, neurological, other* rehabilitation (Module 2)		
Participation goal (ICF)	Documentation of participation goal & Evaluation of goal attainment	ANQ goal documentation
Functioning in activities of daily living	Data collection method: externally assessed	FIM® or EBI
Cardiac (C), pulmonary (P) rehabilitation (Module 3)		
Physical capacity	Review of capacity Review of capacity	6-minute walk test (C/P) Cycle ergometry (C)
Quality of life	Survey: self-assessed Survey: self-assessed	MacNewHeart (C) Chronic respiratory questionnaire CRQ(P)
General health	Survey: self-assessed	Feeling thermometer (P)

* Geriatric, internal, oncological, paraplegic and psychosomatic rehabilitation