The Practicability of General Internal Medicine Quality Indicators in Hospital Inpatient Care

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Research Article

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Abstract

**BACKGROUND:** In the summer of 2021, the Swiss Society for General Internal Medicine (SGAIM) published six quality indicators for the inpatient sector for the first time. The aim of these indicators is to facilitate a structured quality improvement process in internal medicine. The present implementation study examines the practicability of the quality indicators recommended by the SGAIM.

**METHODS:** Using the QUALIFY assessment tool for quality indicators, the SGAIM indicators are structurally evaluated using the example of Hospital Männedorf. Within this framework, a retrospective data analysis of the years 2020 and 2021 was carried out.

**RESULTS:** The results were calculated according to the recommended evaluation intervals and were as such: A provisional discharge report within 24 hours was sent to the follow-up institution for an average of 23.7% of discharges. A new prescription of benzodiazepines in patients with an age of \( \geq 65 \) years occurred in an average of 17.2% of patients per month. The fall history was collected from 100% of the patients. The monthly proportion of patients with transfusions with an Hb value of \( >8 \text{g/dl} \) was 17.9% on average. The proportion of CIRS cases per patient averaged 1.3%. Hepatitis B vaccination protection was available to 100%.

**CONCLUSIONS:** The quality indicators recommended by the SGAIM for the transmission of provisional discharge reports, new prescriptions for benzodiazepines and transfusions with Hb values \( >8 \text{ g/dl} \) proved helpful. Development potential was shown for the following quality indicators: CIRS case processing, biography of falls in the last 12 months and hepatitis B vaccination protection.

Introduction

In 2011, the World Health Organisation (WHO) and Organisation for Economic Co-operation and Development (OECD) identified a comprehensive need for action regarding health risk identification and quality information for stakeholders in Switzerland. As a response the Swiss Health Insurance Act (KVG) has been adopted in 2021 and the associated expansion of Article 58 on quality development, quality orientation in the healthcare system will be significantly strengthened. A quality-oriented development has already been evident for several years in the area of healthcare planning, which is increasingly also based on quality criteria such as minimum volume regulations, certifications, or the availability of specialised staff.

Apart from this, the quality initiatives to date are patchy and of limited informative value. For example, the Federal Office of Public Health (FOPH) has been publishing quality indicators for Swiss acute hospitals since 2008 (Swiss Inpatient Quality Indicators, CH-IQI). These should serve to evaluate and continuously improve treatment outcomes. However, with regard to the publication format and content, only interested professionals can gain knowledge or make statements with the published information due to their complexity. Additionally, the Swiss National Association for Quality Development in Hospitals and Clinics (ANQ) has been conducting various quality measurements since 2009 and publishes their results. The acceptance and usefulness of these ANQ quality indicators are limited, since, for example, data evaluation is very delayed and detailed evaluations of the individual service providers are partly not publicly accessible. Furthermore, measurement methods and clinical evidence are criticised by the SGAIM and others with regard to the improvement of treatment quality.

In order to promote the quality development of individual specialties, many professional medical societies have set up specific commissions for the further development of quality. This was also done by the Swiss Society of General Internal Medicine (SGAIM), which published six quality indicators in 2021 in the areas of patient-centred care quality, general care quality and staff health. With these recommendations, the SGAIM aims to facilitate a structured quality improvement process within inpatient institutions. There are currently no reference and comparison values for the SGAIM quality indicators. The quality indicators studied were newly recommended by the national society of general internal medicine in Switzerland (SGAIM). The practicability and benefit have not yet been scientifically investigated. Therefore, an implementation study in a Swiss hospital is necessary and has been carried out at Männedorf Hospital (Zurich, Switzerland).

Individual quality indicators that already exist nationally are explicitly not recommended by the professional medical association. These are the quality measurements carried out by the ANQ on potentially avoidable re-hospitalisations, point prevalence...
measurements of falls and decubiti as well as results of the survey on patient satisfaction. The quality indicators of the Swiss acute hospitals of the FOPH are not discussed in the recommendations of the SGAIM.

Hospital Männedorf is a primary care hospital in the canton of Zurich (Switzerland) and treats around 2,600 inpatients per year in the Department of Internal Medicine. Process and quality development using the lean management philosophy has been a strategic focus of the hospital for almost ten years. The management of the Clinic of Internal Medicine took the SGAIM recommendations on quality indicators in the inpatient sector as an opportunity to align the hospital's internal continuous improvement process with the recommendations of the professional association and to present them transparently.

The purpose of this implementation study is to test the practicability of the quality indicators recommended by the SGAIM using the QUALIFY assessment tool for quality indicators: Which quality indicators are helpful in the inpatient sector and support the quality improvement cycle intended by the SGAIM? For this purpose, the introduction process in the Clinic for Internal Medicine at Hospital Männedorf will be described, and a retrospective data analysis will be carried out. In addition, the study will for the first time provide comparative values for the SGAIM quality indicators and contribute to the further development of quality of care and quality transparency in Switzerland.

**Methods**

This study is an implementation study to investigate the practicability of quality indicators in internal medicine that have been recommended by the SGAIM for the first time. This approach fills a research gap, as the usefulness and practicability of these new quality indicators had not been scientifically investigated before. In addition, a retrospective data analysis is carried out for the individual quality indicators.

In the present study, N = 5,376 patients were initially included who were treated in the medical clinic at Hospital Männedorf in 2020 and 2021. In the application of the quality indicators for patient-oriented quality of care, 474 patients treated with palliative care were excluded, since the focus of these patients is primarily on maintaining their quality of life. This may influence the expression of the quality indicators. Similarly, 153 patients who entered the hospital due to surgical treatment and were treated by the acute geriatricians of the medical clinic during treatment are also excluded. Thus, a total of n = 4,749 patients are included in the analysis. For the quality indicator concerning staff health, n = 32 physicians were included in this study in 2020 and n = 34 physicians in 2021. Students completing their internships are not included.

Table 1 shows the quality indicators of general internal medicine recommended and not recommended by the SGAIM for inpatient care.

For the implementation of the quality indicators, the hospital in Männedorf was able to draw in part on already existing processes and recorded data. Various data reports from the clinical information system (KIS), the electronic nursing assessment in the acute area (ePA-AC) and the critical incident reporting system (CIRS) were accessed for the evaluation. The data on hepatitis B vaccination protection are recorded manually by the staff medical service at the beginning of employment and were analysed retrospectively for the evaluation. So far, only the physician staff has been systematically evaluated and analysed.

QUALIFY is a proven tool for the methodical assessment of quality indicators to manage the healthcare system. The assessment tool includes 20 methodological quality criteria of the three categories relevance (e.g. utility, consideration of possible negative effects), scientific soundness (e.g. indicator evidence, reliability, validity, statistical discriminatory power) and feasibility (e.g. survey effort, data availability). In this study, relevance and scientific soundness are not examined, as the quality indicators were developed and recommended by the SGAIM as a professional society. The feasibility according to the QUALIFY quality criteria will be tested in this implementation study. The levels for the assessment were determined by the authors.

**Results**

Table 2 shows the results of the retrospective data analysis for the years 2020 and 2021 using the example of the Clinic for Internal Medicine at Hospital Männedorf. The calculations were performed in a spreadsheet (Excel) according to the specifications
of the SGAIM. The quality indicators were evaluated according to the recommended intervals: The number of intervals represents the evaluation intervals included in the analysis.

Transmission of provisional discharge reports: For this quality indicator, the months of January to May 2020 were excluded, as provisional discharge reports were only introduced and technically implemented from June 2020. From June 2020, the monthly values ranged from 5.6% to 39.5% with a mean of 26.5% (average: 23.7%).

New prescription of benzodiazepines: Examination of the evaluation for newly prescribed benzodiazepines in patients aged ≥65 years shows monthly values ranging from 12.2% to 22.9% with a median of 16.9% (mean: 17.2%).

Transfusion with Hb value >8 g/dl: The monthly evaluated percentage of patients with transfusions at an Hb value of >8g/dl results between 0.0% and 40.0% (median: 18.2%, average: 17.9%).

CIRS case processing: The proportion of analysed and discussed CIRS cases per patient is evaluated quarterly on the basis of the completed reports in the reporting group "Internal Medicine". The quarterly values range between 0.7% and 2.2% with a median and average of 1.3% each.

Fall biography of the last 12 months: The fall history is collected for all patients admitted to hospital. These results are not presented due to the lack of variance (i.e. degree of fulfilment 100%).

Hepatitis B vaccination protection: Hepatitis B vaccination coverage is determined annually on the cut-off date of 31 December. In the data years 2020 and 2021, this was 100%. The same two values are not shown in the table.

In an iterative process of data collection and analysis, an initial quality reporting system was established. The retrospective analysis made it possible to build up data reference values to determine the internal situation at the time before the quality indicators were introduced. Figure 1 shows the introduction process and the quality development process based on it at Hospital Männedorf. The hospital-specific data reference values and the reporting were presented at the internal medicine management conference and feedback was obtained. The introductory project was also presented and discussed in the presence of assistant and senior physicians and the nursing service. The subsequent continuous improvement process by the PDCA cycle (Plan, Do, Check, Act) takes place within the framework of regular quality reporting meetings and, if necessary, in-depth case analyses. The use of the PDCA cycle has proven its worth in the context of quality management in the healthcare sector.

Table 3 shows the quality criteria for the feasibility category of the QUALIFY instrument for assessing quality indicators. The results of the feasibility test of the individual quality indicators recommended by the SGAIM are also shown using the example of Hospital Männedorf. Implementation barriers are understood to be, for example, personnel-related technical effort or financial hurdles. Many of the methodological quality criteria are fulfilled (green). Quality criteria that are only partially fulfilled are highlighted in orange, and those that are not fulfilled are in red. It is particularly striking that five of the six quality indicators are only partially or not at all comprehensible and interpretable for patients and the interested public. The collection effort was assessed as low (green) if existing data can be exported from an application. If a combination of available data from several applications is necessary, this was assessed as neutral (orange). The manual collection of a data set was rated as high (red).

Discussion

The publication of the SGAIM quality indicators for the inpatient sector provides an initial expert contribution to the quality development of inpatient internal medicine. The quality-oriented development according to Article 58 of the KVG is thus supported. Based on this law, the Federal Council established the Federal Quality Commission (EQK) for the first time in 2021. It coordinates and promotes national quality activities in the healthcare sector. In view of the current development, the initiative of the SGAIM seems to come at an appropriate time. Transparent quality indicators form an important basis for quality development for professionals, science and health policy. This is particularly important because the quality indicators available in Switzerland have been criticised by professionals of General Internal Medicine, but no alternative has yet been put forward for discussion.

Transmission of provisional discharge reports: The transmission of provisional discharge reports within 24 hours after discharge could be implemented in accordance with the recommendations. A seamless flow of information to post-treatment specialists and
Institutions is in line with the hospital's practical experience, as the prompt transmission of patient information relevant to treatment is expected. Donabedian describes the importance of coordinating all healthcare providers involved as a crucial part of a comprehensive understanding of quality. In Hospital Männedorf, it became apparent in that there is still a need for training in the use of the application in reporting (reports were not correctly completed, sent and archived). A monthly analysis of this quality indicator also enables timely interventions if negative developments are detected. From a health economic point of view, it should be critically noted – with regard to provisional discharge reports – that two reports (provisional, definitive) must be taken into account in the post-treatment institution. Since both reports have to be consulted, additional costs are incurred. As part of the digital further development of all service providers in the outpatient and inpatient sector, digital, timely and complete information processes via the electronic patient dossier (EPD) should be strived for in the medium term. At the present time, however, the quality indicator makes a valuable contribution to improving treatment continuity and reducing avoidable complications.

**New prescription of benzodiazepines and Transfusion with Hb value >8 g/dl**: The new prescription of benzodiazepines and transfusions with Hb values >8 g/dl were included in quality reporting at Hospital Männedorf in accordance with the recommendations. Due to the broad acceptance among the medical staff as well as the comprehensible indicator descriptions, it became apparent in a short time that the preparation of results and the discussion led to sensitisation for these topics. However, the example of Hospital Männedorf showed that a monthly evaluation has a high variance due to the low patient volume and the associated few transfusions. This limits the statistical significance of the quality indicator considerably. Nevertheless, a monthly analysis of the indicators appears to make sense in order to enable short-term internal analyses in the event of anomalies.

**CIRS case processing**: According to the SGAIM, the quality indicator on the subject of CIRS is intended to promote an active error culture with discussion and analysis of CIRS cases. In Hospital Männedorf, the recommendations were adopted on a trial basis. However, this quality indicator must be viewed critically from several perspectives. For example, the number of CIRS cases per patient does not allow any conclusions to be drawn about the qualitative case description and processing quality. In addition, CIRS reports are based on voluntariness. Furthermore, they cannot always be clearly assigned to a clinic or a specialty. On the one hand, this is because some patients are treated in other departments (e.g., geriatric traumatology); on the other hand, some CIRS cases are processed in support departments such as IT or medical technology (CIRS reporting groups). In addition, the potential of clinical risks, for example depending on the complexity of treatment and length of stay, as well as actual treatment errors resulting in liability cases, remain unconsidered. Employee satisfaction and team culture can also influence reporting behaviour. Based on the explanations, the quality indicator is not considered useful by the authors. High-quality case descriptions would be better suited to achieving the intended goal, as this allows for systematic case processing. This can be achieved through training for all employees and will contribute to an awareness of the employees for the reporting of CIRS cases (structural quality according to Donabedian). The experience of Hospital Männedorf with a CIRS that has been in place for many years shows that more well-founded and transparent case processing motivates reporters to report further cases. As a measure of the error culture, the proportion of CIRS cases reported by known reporters could be used throughout the hospital. This is important because, in the case of non-anonymous cases, the reporters can be involved in the case processing if necessary and thus a more well-founded case analysis is possible. The proportion of CIRS cases that are not reported anonymously also reflects the trust in CIRS and the safety and error culture within the hospital. For example, according to the national quality report by Vincent and Steines and a meta-analysis by Manser, it is impossible to improve safety and quality problems without an open culture of conversation.

**Fall biography of the last 12 months**: In Hospital Männedorf, as in many other hospitals in Switzerland, the survey of fall biographies is already standardised for all inpatients as part of the electronic nursing assessment in the acute care sector. The survey ensures part of the process quality in order to be able to prevent future falls through preventive interventions. However, whether and in what quality the fall history and the fall prevention measures are discussed and implemented in the interprofessional treatment team remains unconsidered. The SGAIM recommendations do not define which professional group is recommended to conduct the survey. However, it is in the interest of the patients that existing information from other professional groups is used. Since the electronic nursing assessment previously provided for recording the fall history of the last two months, the assessment processes in Hospital Männedorf were adapted to twelve months and the nursing staff, who primarily work with the assessment, were trained in this regard. Without electronic nursing assessment, the indicator appears to support quality. However, if the fall history is systematically collected on admission, the quality indicator does not provide any added value...
due to a lack of variance. In this case, it would be relevant to analyse whether preventive measures were initiated based on any history of falls.

**Hepatitis B vaccination protection:** This involves recording the sufficiency of hepatitis B vaccination protection among employees with potential contact with blood or contaminated material. This quality indicator is a spot measurement once a year based on the number of employees. The respective delimitation of the staff proves to be difficult, since many employees work for several clinics, for example, employees of the housekeeping service or the nursing staff of interdisciplinary wards. Further challenges are so-called “non-responders” (persons who do not respond to vaccination or only respond to a limited extent), vaccine-critical persons, and the high turnover, especially among staff undergoing training. External partners, such as medical consultants, are also not taken into account. In Hospital Männedorf, the first step was therefore limited to the salaried physician staff of the Clinic for Internal Medicine and the cut-off date of December 31 was chosen. An extension to other professional groups will be evaluated after the pilot phase. There is also the question of whether hepatitis B vaccination protection allows a statement to be made about the health of employees. For example, the STRAIN study "Work-related stress among health professionals in Switzerland" by the Bern University of Applied Sciences describes numerous other factors that have an impact on the health of healthcare professionals. For example, moral stress or physical and psychological workload are not considered in the SGAIM recommendations. An institution-wide survey of the quality indicator may be useful. From the authors’ point of view, however, other factors, such as workload according to the STRAIN study, appear to be more relevant in the field of employee health.

**Overall:** The quality indicators defined by the SGAIM proved to be largely feasible in practice. The data for all indicators were available and, thanks to a high degree of digitisation, could be exported completely and in a structured manner from the various systems and evaluated at Hospital Männedorf with little effort. Only the data for the quality indicator of hepatitis B vaccination protection had to be evaluated manually. All indicators are comprehensible to physicians and nurses. Only the quality criterion of comprehensibility and interpretability of the indicator for the interested public and patients is not consistently met. However, the criteria applied by the SGAIM do not have the same claim of comprehensibility for the public as the QUALIFY evaluation model. According to the SGAIM, the quality indicators aim to support the measurement of a structured quality improvement process and not to provide quality transparency to stakeholders. For this purpose, the professional association was guided by the criteria of the American College of Physicians (ACP) and also subjected them to an external review. Based on the results of this study as well as the previous discussion, the question arises as to whether the quality criteria for relevance and scientific soundness delineated in this study are always given. In the case of the CIRS quality indicator, for example, the question arises as to whether validity is given: Does the indicator measure what it purports to measure? In addition, there should be a statistical discriminatory ability of the results with potential for improvement for each indicator, so that quality development is possible and recognisable in the course. In this study, for example, this was not the case for the quality indicator on fall history.

Individual quality indicators are not only suitable for internal medicine, but also across specialties. In the interest of quality orientation that goes beyond inpatient internal medicine, it would be ideal for the quality indicators to be recognised by all actors in the healthcare system.

The quality indicators of Swiss acute hospitals (CH-IQI) of the FOPH remain unconsidered and undiscussed by the SGAM. In the sense of standardised quality transparency for all stakeholders in the healthcare system and comparable quality development, it would be welcome if the SGAIM were to contribute its knowledge and experience to the further development of the national quality indicators. This is particularly recommended, since the FOPH accepts suggestions from service providers, professional medical societies and individuals according to a publicly visible change process, carries out a risk adjustment and enables comparisons between institutions. Such suggestions would enable sustainable improvement based on quality transparency. Expansion by means of a peer review process following the example of the Initiative Quality Medicine (IQM) would also be a conceivable option.

**Limitations**

The existing evaluations of the quality indicators in Hospital Männedorf are valuable for the internal PDCA cycle and the further development of quality in the Clinic for Internal Medicine, whereby multi-year comparisons should be sought in the future.
results presented allow comparisons with other hospitals only to a limited extent, as individual quality indicators would require risk adjustment. The small amount of data, which is due to the circumstances of a regional hospital, can also be criticised. The present study showed large fluctuations in the recommended and evaluated intervals of the quality indicators. It can also be objected that patients treated in palliative care and across hospitals are not included in this study. The evaluations for the quality indicators on the topics of CIRS and hepatitis B vaccination status were adapted to the framework conditions of Hospital Männedorf.

Likewise, it can be criticised that only one category of the QUALIFY assessment model was evaluated for the assessment of the quality indicators. Moreover, the model was developed for the management of healthcare (system level) and not primarily for individual application in a hospital.

Furthermore, the search for simple methods and appropriate quality indicators in a highly complex environment such as healthcare remains a challenge, as Donabedian also describes. The simplification of complex topics into methodologically simple quality indicators is justified if a high correlation between an indicator and quality can be demonstrated. The SGAIM recommendations fulfil these recommendations to a limited extent at the present time.

Conclusion and outlook

As part of the quality development at Hospital Männedorf, the Clinic for Internal Medicine used the recommendations of the professional association SGAIM. An initial, retrospective data preparation of the quality indicators recommended by SGAIM for the years 2020 and 2021 was carried out. This represented the starting point for the critical evaluation and discussion of the recommendations from the perspective of hospital practice. Based on this, the recommended quality indicators were adapted to the framework conditions and the needs of the hospital, and regular quality reporting was implemented in the sense of the PDCA cycle based on the partially adapted quality indicators. In addition, the feasibility was systematically checked using the QUALIFY assessment tool and largely confirmed.

The quality indicators recommended by the SGAIM for the transmission of provisional discharge reports, new prescription of benzodiazepines and transfusions in case of Hb value of >8 g/dl proved to be helpful. Further development seems indicated for the following quality indicators and is discussed in the present study: CIRS case processing, fall history of the last 12 months, and hepatitis B vaccination protection. First experiences show that the discussion about the quality indicators and their internal hospital reporting contribute to sensitisation for the topics. Considering the quality improvement cycle, the authors are confident that the quality indicators will improve in the future. This would mean that an important goal of the SGAIM would be achieved.

In the interest of national quality development in accordance with the KVG, it is desirable for the professional society to contribute its quality indicators to the national quality efforts, which are coordinated by the EQK. Likewise, the quality criterion “comprehensibility and interpretability for patients and the interested public” should be given greater consideration in the future in order to promote quality transparency and reduce information asymmetries in the healthcare system.

References


Tables

<table>
<thead>
<tr>
<th>Topic</th>
<th>Quality indicator</th>
<th>Description of the SGAIM quality indicator</th>
<th>Evaluation interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-centered quality of care</td>
<td>Transmission of provisional discharge report</td>
<td>Proportion of provisional discharge reports transmitted to the post-acute care physician within 24 hours (with diagnoses, procedures and medications as well as reasons for medication changes)</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>New prescription benzodiazepines</td>
<td>Proportion of patients ≥65 years with a new prescription of a benzodiazepine during hospitalisation</td>
<td>Monthly</td>
</tr>
<tr>
<td></td>
<td>Fall biography of the last 12 months</td>
<td>Proportion of patients ≥65 years of age who were asked about falls (number, cause) within the last year</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>Transfusion with Hb value ≥8 g/dl</td>
<td>Proportion of patients with transfusion preservation at a haemoglobin value (Hb) of more than 8 g/dl</td>
<td>Monthly</td>
</tr>
<tr>
<td>General quality of care</td>
<td>CIRS case processing</td>
<td>Proportion of CIRS cases in hospitalised general medical patients that were analysed and discussed</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Staff Health</td>
<td>Hepatitis B vaccination protection</td>
<td>Proportion of employees with sufficient hepatitis B vaccination protection in case of potential contact with blood or blood-contaminated materials</td>
<td>Annually</td>
</tr>
<tr>
<td>ANQ Quality measurements</td>
<td>Potentially avoidable re-hospitalisations</td>
<td>Not recommended</td>
<td>Annually</td>
</tr>
<tr>
<td></td>
<td>Patient satisfaction with hospital stay</td>
<td>Not recommended</td>
<td>One defined month every two years</td>
</tr>
<tr>
<td></td>
<td>Prevalence measurement of falls and pressure ulcers</td>
<td>Not recommended</td>
<td>One reference date per year</td>
</tr>
</tbody>
</table>
Table 2: Results of the retrospective data analysis of the years 2020 and 2021 using the example of the Clinic for Internal Medicine at Hospital Männedorf

<table>
<thead>
<tr>
<th>Quality indicator</th>
<th>Evaluation intervals considered</th>
<th>M</th>
<th>SD</th>
<th>Min</th>
<th>Q1</th>
<th>Md</th>
<th>Q3</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of provisional discharge reports within 24 hrs.</td>
<td></td>
<td>19</td>
<td>23.7%</td>
<td>10.0%</td>
<td>5.6%</td>
<td>17.1%</td>
<td>26.3%</td>
<td>30.8%</td>
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<tr>
<td>Proportion of patients ≥65 with newly prescribed Benzodiazepine</td>
<td></td>
<td>24</td>
<td>17.2%</td>
<td>2.7%</td>
<td>12.2%</td>
<td>15.4%</td>
<td>16.9%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Proportion of patients with transfusion at Hb value &gt;8g/dl</td>
<td></td>
<td>24</td>
<td>17.9%</td>
<td>9.4%</td>
<td>0.0%</td>
<td>14.5%</td>
<td>18.2%</td>
<td>19.8%</td>
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<tr>
<td>Proportion of completed CIRS cases per patient</td>
<td></td>
<td>8</td>
<td>1.3%</td>
<td>0.5%</td>
<td>0.7%</td>
<td>1.0%</td>
<td>1.3%</td>
<td>1.5%</td>
</tr>
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</table>

Table 3: QUALIFY application tool: Evaluation of the feasibility of the SGAIM quality indicators based on the Hospital Männedorf implementation example

<table>
<thead>
<tr>
<th>QUALIFY quality criteria</th>
<th>Transmission of provisional discharge report</th>
<th>New prescription benzodiazepines</th>
<th>Fall biography of the last 12 months</th>
<th>Transfusion with Hb value &gt;8 g/dl</th>
<th>CIRS case processing</th>
<th>Hepatitis B vaccination protection</th>
</tr>
</thead>
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<tr>
<td>Comprehensibility and interpretability for patients and the interested public</td>
<td>Partial</td>
<td>Partial</td>
<td>Yes</td>
<td>Partial</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Comprehensibility for doctors and nurses</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Influenceability of the indicator manifestation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Partial</td>
<td>Yes</td>
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<tr>
<td>Data availability</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Partial</td>
</tr>
<tr>
<td>Collection effort</td>
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<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>Neutral</td>
<td>High</td>
</tr>
<tr>
<td>Implementation barriers considered</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Partial</td>
<td>Partial</td>
</tr>
<tr>
<td>The accuracy of the data can be verified</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>The integrity of the data can be verified</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>Yes</td>
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<tr>
<td>The completeness of the data can be verified</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tr>
</tbody>
</table>

Figures
Figure 1

Introduction and quality development using SGAIM quality indicators using the example of the Clinic for Internal Medicine at Hospital Männedorf

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- Table1.docx
- Table2.docx
- Table3.docx