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# Informing the development of a resource allocation framework in the German healthcare system

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# Summary

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In the German statutory health insurance (SHI) system, the payment of office-based physicians in the ambulatory care sector is based on a complex system involving national and regional stakeholders. Payment rates are derived from a national relative value scale but, as budgets are negotiated at the regional level, conversion factors for the relative values and thus prices for the same service can vary by region. In a move towards a simplified and comprehensible approach that adequately represents services provided in the ambulatory care sector, the government has asked the Valuation Committee (*Bewertungsausschuss*) for a proposal for the gradual convergence of payment based on nationally uniform prices.

Against this background, the National Association of Statutory Health Insurance Physicians (*Kassenärztliche Bundesvereinigung*, KBV), member of the Valuation Committee, is looking to develop a national approach that allocates funds according to a unified framework, while taking account of regional characteristics. As part of this new approach, the KBV seeks to incorporate quality indicators into the allocation formula so as to improve the overall quality of care provided by SHI physicians. This report aims to inform the development of the quality component of the proposed national resource allocation framework in the German statutory healthcare system by providing an overview of quality indicator systems and quality measurement approaches, including criteria for selecting measures of quality currently used for ‘high stakes’ assessment in high-income countries globally. High stakes uses of performance measures mean that the provider’s performance scores are used for public accountability (making results transparent through public reporting) and/or for differentially allocating resources (pay-for-performance or P4P).

## Defining good quality care

The operationalisation of healthcare quality ranges from simple approaches such as Donabedian’s seminal ‘structure–process–outcome’ classification to complex, multiple-domain frameworks. The most common domains relate to effectiveness, efficiency and access, followed by patient focus and related concepts, and patient safety. On the basis of published frameworks we propose nine domains of healthcare quality for consideration by the KBV:

1. *Screening/primary prevention*: Strategies aimed at preventing the development of a disease (e.g. immunisation) (primary prevention) or the testing of a symptomless population in order to detect cases of a disease at an early stage (screening).

2. *Access/availability*: Extent to which services are available and accessible in a timely manner.
3. *Clinical effectiveness*: Extent to which a service achieves the desired result(s) or outcome(s) at the patient, population or organisational level.
4. *Safety*: Extent to which healthcare processes avoid, prevent and ameliorate adverse outcomes or injuries that stem from the processes of healthcare itself.
5. *Efficiency*: Relationship between a specific product (output) of the healthcare system and the resources (inputs) used to create the product.
6. *Equity*: Extent to which the distribution of healthcare and its benefits among a population is fair; equity implies that, in some circumstances, individuals will receive more care than others to reflect differences in their ability to benefit or in their particular needs.
7. *Comprehensiveness/coordination*: Extent to which a range of services is provided that is broad enough in scope and depth and/or continuous, integrated and organised to meet service user needs.
8. *Patient experience*: Extent to which the patient perspective and experience of a service is measured and valued as an outcome of service delivery.
9. *Management/organisation*: Extent to which management processes are in place to deliver on the above domains of quality.

### **Criteria for selecting indicators for ‘high stakes’ applications**

If quality measurement is to guide quality improvement, indicators should meet certain criteria based on the evidence that taking a particular action leads to some desired outcome, such as lower morbidity or mortality. However, quality measures are frequently selected on the basis of what is available and practical (‘measurable’), and the extent to which these reflect the quality of healthcare, or indeed their implications for policy, often remains unclear.

Of the range of desirable attributes of quality indicators that have been proposed we suggest adapting those maintained by the US National Quality Forum, which are used widely:

- *Importance*: Does the indicator provide information on a topic of relevance to decisionmakers?
- *Scientific soundness*: Does the indicator capture the underlying construct in a reliable and valid way, and is it based on evidence or solid professional consensus?
- *Feasibility*: Is it possible to collect data for the indicator with reasonable effort?
- *Usability*: Can the indicator provide actionable information for decisionmakers?

### Indicators in current use

We reviewed 18 quality measurement systems that are being used by a variety of public and private organisations in six countries, with one pan-European indicator system added. From these we extracted 826 quality or performance indicators that we attributed to at least one of the nine domains of quality guiding this work.

The key findings of our review are:

- *The majority of quality indicators being used in 'high stakes' applications address clinical effectiveness and there were few measures of efficiency and equity.* The relative weight assigned to the indicator domains varied by organisation and country; for example, while clinical effectiveness indicators are represented in all systems their proportion varies between 19% (Australia) to over 60% (Sweden, US) of all indicators. Screening/primary prevention indicators are represented in most systems, accounting for between 16% (Australia, Canada) and 26% (New Zealand), while indicators on access/availability form an important component in Australia, Canada and Sweden only. Indicators of patient experience and patient safety are less common and indicators of coordination, efficiency and equity are rarely used. This is mostly because there is a lack of appropriate indicators in these domains.
- *What is being measured within certain domains is highly variable, reflecting differences in the importance that is attached to different diseases and conditions.* For example, access, whether in relation to specific services and/or by specific population groups, is a high policy priority in a number of countries, including Australia, Canada, New Zealand and Sweden.
- *Measurement focuses on common and well-defined conditions with a solid evidence base, such as heart disease and diabetes.* In clinical areas where the evidence base for clinical management is not as well developed and there is less consensus on the management of the condition, indicator development is more difficult; consequently, these areas remain underrepresented. An example is mental health, with the possible exception of depression. The tendency to focus on what can be measured is problematic in 'high stakes' assessment, such as P4P schemes, as it may divert attention from areas not covered by indicators, irrespective of their clinical importance.
- *Indicators tend to focus on what should be done rather than on what should not be done.* We consider this a significant weakness in the current state of performance measurement systems, especially as overuse of medical procedures is a significant problem in many countries. Better evidence-based criteria to identify areas of overuse of care are needed.
- *Local priorities, perceptions of problems and political factors drive priority setting.* In Canada and Sweden there is great concern about waiting times for treatment. In New Zealand, there is concern that Māori and Pacific Island populations do not have fair access to medical care. Systems in the US and England/the UK tend to emphasise indicators of clinical effectiveness. Because of the higher penetration of electronic medical records, clinical effectiveness indicators in England/the UK are more detailed, so they can track intermediate outcomes such as blood pressure and cholesterol levels and whether counselling was provided to the patient. In other countries there is a

stronger emphasis on tracking whether the right process of care was delivered (e.g. whether those with diabetes were given an HbA1c test). This suggests that it will be important for the KBV to tailor a German framework for quality indicator selection that is based on both German priorities and the particularities of Germany's delivery system, which includes the type of data available to construct a performance measure.

### **Quality indicators in resource allocation in Australia, Canada, England and New Zealand**

The use of quality or performance indicators in 'high stakes' assessments mostly takes the form of accountability frameworks that involve public reporting, including systems that use quality indicators as part of pay for performance schemes.

Operating at national (Australia, England, New Zealand) or regional level (Canadian provinces), the accountability frameworks reviewed vary in nature, scope and level of implementation. However, with the possible exception of Ontario's Cancer System Quality Index (CSQI), there is little documented evidence of the impact of the public reporting systems identified here. Evaluation of the CSQI noted that because it included clinicians in indicator selection and reports publicly only on indicators that have been used internally for a number of years, it has encouraged change by identifying quality gaps.

This is in contrast to the use of quality indicators as part of pay for performance (P4P) schemes operating in Australia, England/the UK and New Zealand. These include the Practice Incentives Program (PIP) in Australia, which offers financial incentives for general practices to support quality care and so improve access and health outcomes; the Quality and Outcomes Framework (QOF), a P4P scheme for general practice in England and the UK; and the Primary Health Organisation (PHO) Performance Management Programme in New Zealand, which provides PHOs with additional funding for achieving a range of national indicators.

There is evidence of impact for all three schemes, including increased adoption of electronic records and/or transfer systems, facilitated by support structures at a regional level (Australia: divisions of general practice) or a national level (national IT system for the automated extraction of data in England/the UK). There were also documented improvements in care processes for major chronic diseases and effects in reducing health inequalities (England) or increased access for disadvantaged groups (Australia, New Zealand). However, perceived limitations included a potential mismatch between national priorities and local relevance of assessed indicators (New Zealand), and the potential for distortion. Experience in England in particular suggests there is no single approach that can be guaranteed to lead to a major improvement in quality. Indeed, it is likely that only a combination of multiple interventions sustained over time will improve quality.

### **Development of a quality measurement framework for Germany**

Based on our review, and taking account of the evidence presented in country case studies, we conclude that the development of a quality framework for Germany will depend on:

- data availability (and willingness to invest in data capture, such as through electronic medical records or dedicated data collection)

- regional and/or local perceptions of the priority areas for quality improvement
- societal norms, especially in relation to the relative importance of some aspects of care.

The work that has occurred in other countries to build quality measurement systems can inform decisions for Germany. Lists of indicators such as those reviewed here offer a range of possibilities to include in a framework for the KBV. There are also well-tested methods for combining evidence with local professional opinion to select quality indicators sensitive to the needs of individual countries. However, because of the importance of incorporating local priorities and local context, the work to develop a German framework has ultimately to be carried out in Germany, preferably with substantial input from German physicians and other stakeholders.