Quality indicators in rheumatology: valid for whom?

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In this issue of the *Annals of the Rheumatic Diseases*, Van Hulst and colleagues[1] have published a paper on the development of quality indicators for monitoring of the disease course in rheumatoid arthritis (RA). By focusing on the monitoring of the disease course, Van Hulst *et al*[1] have made an important and relevant contribution to the improvement of the quality of care for RA patients. Over the past decades, it has been consistently demonstrated that intensive monitoring of the disease course and the subsequent adaptation of drug treatment have significant positive effects on disease activity, radiological damage, activities and participation and overall quality of life.[2–11] Despite ample evidence from the literature and the availability of various guidelines, recommendations and quality indicators addressing the monitoring of the disease course,[12–17] several audits of rheumatologists' clinical practice have demonstrated a substantial lack of compliance with recommendations on disease monitoring.[18 19] The set of quality indicators presented by van Hulst *et al*[1] gives rheumatologists practical guidance on how to implement the available evidence on disease monitoring into their practices.

The quality indicator ''industry'' is currently booming, in rheumatology as in health care in general, as this is seen as an important strategy to improve the quality of care. Quality indicators measure, as defined by the US Institute of Medicine, ''the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge''.[20 21] Quality indicators are commonly derived from already available sets of guidelines or recommendations, and/or literature searches and expert opinion, according to a systematic approach.[22 23] It should be noted that, in contrast to most guidelines or recommendations, quality indicators pertain to measurable aspects of health care. This is exactly how the set of quality indicators for monitoring the course of RA as developed by Van Hulst *et al*[1] distinguishes from the currently available guidelines, recommendations and indicators on the management of RA:[12–17] it describes exactly who should do what to whom and when with respect to disease monitoring.

Quality indicators can be related to the structures, the processes or the outcomes of care.[24 25] The structures are the innate characteristics of providers and the system, whereas the processes pertain to what healthcare providers do in delivering care, and the outcomes to what happens to patients, particularly with respect to their health.[24 25] The proposed set of quality indicators on the monitoring of the disease course in RA comprises indicators within all these three dimensions.

There are various mechanisms by means of which quality indicators may improve the quality of arthritis care. First, their usage may raise awareness among individual rheumatologists and practices regarding gaps in their services. Second, governments and healthcare funding bodies are increasingly beginning to build rewards and penalties into payment for medical services based on measurable aspects of healthcare processes and outcomes. Third, the public release of data regarding individual rheumatologists' or practices' performance with respect to quality indicators may influence patients' and referring physicians' choices for specific rheumatologists or practices.

The proposed set of quality indicators on the monitoring of the disease course in RA is likely to raise questions on the place of quality indicators in rheumatology in general. By taking the paper by van Hulst *et al*[1] as an example, this editorial discusses a number of issues related to the establishment and use of quality indicators in rheumatology practice.

With respect to the establishment of quality indicators, it is first important to take differences in healthcare delivery within and among countries into account.[26] The study by van Hulst *et al*[1] involved 13 rheumatologists, some of whom did not participate in all steps of the development process. Therefore, it remains unclear to what extent they are representative of all rheumatologists in The Netherlands. As only Dutch rheumatologists were included, the generalisability to other countries is questionable. The Dutch healthcare system is characterised by a relatively high number of rheumatologists and almost complete coverage of costs associated with medical specialist care for the majority of the population (>99% has health insurance without any financial barriers for medical specialist care). Practice organisation (including the availability of clinical nurse specialists) and reimbursement systems may, however, vary largely among countries. It is therefore conceivable that rheumatologists' views on this set of indicators may be different in countries where, for example, clinical nurse specialists are not available or patients have to pay for every outpatient consultation.

Second, the outcomes of the development processes based on the Rand/University of California at Los Angeles methodology[23] are very sensitive to the composition of the expert panel that is used, especially when scientific evidence is scarce. With respect to disease monitoring, evidence for the optimal frequency is lacking, so that the indicator largely reflects the view of the panel. This panel, however, only included rheumatologists. Given the general tendency to enhance the role of the patient in the management of RA and disease monitoring in particular, it is likely that the involvement of patients could have added to the validity of indicators concerning the frequency of monitoring. Examples of the successful involvement of patients related to this issue include the usage of home-based disease monitoring tools[27 28] or patient-initiated care, in which the patient decides when to see a rheumatologist instead of the rheumatologist determining the frequency.[29] The usage of clinical nurse specialists in the monitoring of the disease course is another example of lacking evidence. As the extent to which clinical nurse specialists in The Netherlands are currently trained to assess the course of the disease varies largely, the involvement of clinical nurse specialists or other health professionals such as physician assistants, with various education and skills levels, could probably have influenced the contents of this set of quality indicators.

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Concerning the usage of sets of quality indicators in daily practice, there are a few points to consider. First, the size of quality indicator sets. The current set on disease monitoring in RA concerned 18 quality indicators, yet reflects only one aspect of RA management. If all other elements, such as the diagnostic process, the monitoring of drug side effects or non-pharmacological treatments, would be worked out with the same level of detail, the total set of quality indicators for RA management would comprise dozens of indicators. The feasibility of such extensive sets must also be seen in the light of the current development of sets of quality indicators for rheumatic diseases other than RA, such as systemic lupus erythematosus.[30] It is clear that quality indicators, although probably addressing the same management issue, cannot be simply exchanged among different rheumatic conditions. It is, however, conceivable that some quality indicators, in particular those related to the structure of care, are applicable to rheumatological practice as a whole. In this respect, more collaboration and standardisation in the development of quality indicator sets for various rheumatic conditions seem warranted.

In addition, increasing numbers of quality indicator sets are being imposed by hospital boards, healthcare funding bodies and patient organisations. Given the large and growing number of quality indicators, it is important to define their status clearly and whether they reflect fixed, minimum or "threshold" standards, or rather aspirational targets, aimed at maximising quality within the constraints of the available resources, and being amenable to change.[31 32] If the status of a quality indicator set remains unclear, data on rheumatologists' performance with regard to all aspects of its contents can easily be misinterpreted or misused. With relatively extensive sets of quality indicators, such as the current set for disease monitoring, the selection of a smaller, "minimum" set of indicators from this larger set could be considered. An example of such a selection is the American College of Rheumatology endorsed set of seven indicators on RA management.[33] This set, partly based on the Arthritis Foundation's Quality Indicator Set for Rheumatoid Arthritis, which includes 27 quality indicators,[17] comprises one quality indicator on the periodic assessment of disease activity.

A second point related to the usage of quality indicators is their registration. Indeed, as the authors point out, an electronic registration system may enhance the implementation of sets of quality indicators. Various electronic applications are currently available, which commonly comprise a tool for regularly measuring and following disease activity in individual patients as well as a database for data processing and storage.[34] Examples of such tools are METEOR (an acronym for measurement of efficacy of treatment in the "era of outcome" in rheumatology)[35] and a tool called GoTreatIT.[36] These tools by far do not include all the measures included in the proposed set of quality indicators, but could probably be modified in such a way that they would comprise a more concise set. By integration with an electronic medical record, the registration of quality indicators may not become a goal in itself.

Apart from all these considerations pertaining specifically to quality indicators, it should be noted that these are just one of several other strategies to improve the quality of care. Examples of other methods include continuing medical education, making effective use of information technologies including, eg, computer-based decision aids, and the development of evidence-based guidelines and practice recommendations. Given the efforts put into the development of sets of quality indicators, evaluations of their added value with respect to improvement of the quality of arthritis care should be weighted against the costs of their development and implementation. For that purpose, systematic evaluations of their usage, effectiveness and the costs are very much needed.

In conclusion, developing and incorporating quality indicators is one of various methods to improve the quality of arthritis care. All of these require a redesign of care processes in the rheumatological practice, which we will undoubtedly witness over the coming decade.[37 38]

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