

Is a Patient Questionnaire Without a Joint Examination as Undesirable as a Joint Examination Without a Patient Questionnaire?



Patient questionnaires have gained increasing prominence in the treatment of rheumatic diseases over the last few decades. Three patient self-report scores for physical function, pain, and patient global estimate are included in the rheumatoid arthritis (RA) core dataset¹. These 3 scores distinguish active from control treatments in RA clinical trials involving leflunomide², methotrexate², anakinra³, adalimumab⁴, abatacept⁵, and certolizumab⁶, at levels of significance similar to formal joint counts or laboratory tests. Patient physical function scores generally are more significant than radiographic scores or laboratory test results in the prognosis of severe longterm RA outcomes such as work disability and premature mortality^{7,8,9,10}. Routine Assessment of Patient Index Data (RAPID3), an index of only the 3 patient-reported RA Core Data Set measures, is correlated significantly with standard indices that require a formal joint count, such as DAS28 (28-joint Disease Activity Score) and CDAI (Clinical Disease Activity Index)^{11,12}. A RAPID3 score of $\leq 3/30$ with 1 or 0 swollen joints, RAPID3 $\leq 3 + \leq$ SJ1, provides remission criteria comparable to Boolean¹³, SDAI (Simplified Disease Activity Index), CDAI, and DAS28¹⁴ criteria in far less time than a formal joint count, in studies of the French ESPOIR early arthritis cohort¹⁵.

The above “scientific” rationale for patient questionnaires is supported further by a number of pragmatic advantages. RAPID3 is scored in about 5 s versus almost 2 min for DAS28 or CDAI^{11,12}. A multidimensional Health Assessment Questionnaire (MDHAQ)/RAPID3 helps the patient prepare for the visit when completed in the waiting area immediately prior to seeing the doctor¹⁶. The patient does 98% of the work, and provides the same observer at each visit, eliminating a requirement for the same professional to perform a formal assessor joint count¹⁷. MDHAQ provides clues to noninflammatory musculoskeletal pain such as fibromyalgia^{18,19} and documents improvement in patients

with all rheumatic diseases^{20,21}. MDHAQ saves time for the doctor, by providing a summary of most aspects of the patient history, to advance doctor-patient communication and improve documentation¹⁶.

One apparently attractive feature of patient questionnaires is that they might be used to monitor patient status over time, while reducing the number of visits to health professionals, thereby reducing costs. Hewlett, *et al* have reported that HAQ may be used to monitor clinical status in selected patients without planning specific visits to rheumatologists²². Outcomes in pioneering double-blind studies were as good as or better than in patients who had traditional, regularly scheduled visits to a rheumatologist, while costs were reduced²².

An article in the current issue of *The Journal*²³ evaluated monthly self-report questionnaires for patients with RA to predict DAS28 > 3.2 at routine visits scheduled every 3 months, with a goal to identify an RA flare and intensify treatment as early as possible. The authors found substantial fluctuations in patient measures between visits, consistent with an earlier study²⁴. However, most fluctuations that indicated transient worsening of clinical status improved to earlier levels spontaneously²³, as in the previous study²⁴. While DAS28 and patient questionnaire data were correlated significantly in patient groups, changes in patient self-report data were of limited value to predict DAS28 scores in individual patients²³.

The authors recognize limitations to monitoring patients only with self-report questionnaires²³. Complete patient data for all 13 timepoints were available for only 47% of patients, and 24% missed 4 or more timepoints²³, again similar to the previous study²⁴. One explanation may be that a patient may not find completing a questionnaire at home at an apparently random time to be as relevant as completing it in the waiting area just prior to an encounter with her/his doctor. The clinical trial of Hewlett, *et al*

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excluded about one-third of patients who were not regarded as appropriate for monitoring without planned visits²², and included a number of specific safeguards, particularly that the patient's general physician was aware of a primary responsibility to manage study patients²².

Of course, keeping track of a patient with self-report questionnaire scores completed over the Internet can appear to provide considerable savings, with fewer visits to doctors and other health professionals. Patients also may reduce costs of missing work, babysitting support, fuel, parking, and other indirect costs to visit a medical facility. Periodic patient questionnaires without visits probably can be implemented in selected patients effectively.

We would be concerned, however, that a general approach of using patient self-report as a primary basis to determine a need to visit a health professional as needed, without planned visits, may not be an effective strategy for most patients. Recognition of fluctuations in clinical status between visits appears of limited value if status at actual visits appears unchanged. Review of periodic patient questionnaires by a health professional may involve costs as great as the savings realized by not scheduling regular visits. Indeed, possible unnecessary visits and changes in therapies could actually increase costs.

Each of us finds MDHAQ/RAPID3 invaluable in usual patient care to provide quantitative data rather than relying only on nonquantitative impressions in formulating a patient history. Nonetheless, MDHAQ/RAPID3 is not a substitute for discussion with a patient. Indeed, further discussion is required to interpret MDHAQ/RAPID3 scores, just as it is to interpret laboratory tests. Further, every visit of a rheumatology patient should include a careful joint examination, although not necessarily a formal joint count, as well as consideration of imaging studies, laboratory tests, and other measures.

Face-to-face interactions between patients and health professionals often elicit important information that self-report questionnaires hint at, but cannot provide definitively. MDHAQ/RAPID3 in no way prevents collection of traditional measures, which remain important in the care of individual patients.

We suggest that a rheumatology patient evaluation without patient self-report information is most undesirable. The encounter often is greatly enriched by patient self-report questionnaire data, which generally are more sensitive to changes and of greater prognostic value than laboratory tests or imaging studies. However, monitoring patient status with only self-report information without face-to-face visits, including a joint and general physical examination, may be equally undesirable for most patients. The traditional encounter between patient and health professional — with a patient history, physical examination, and interactive conversation — remains the cornerstone of optimal patient care toward better outcomes. Patient questionnaires are not a substitute for periodic face-to-face

encounters that include a traditional patient history and physical examination.

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