Development of the Quality Indicators

The Dutch physical therapy and manual therapy guidelines for low back pain distinguish between a diagnostic phase and a treatment phase in the process of care. Every phase includes several steps, each covered by a number of recommendations (see eAppendix 1). These recommendations were extracted by 2 members of the research team working independently (G.M.R. and S.D.). Differences were discussed, if necessary, with a third member of the team (R.A.O.), until consensus had been reached. Because it seems fair to expect that physical therapists are more inclined to follow up on recommendations with higher levels of evidence, the recommendations were compared with the latest European guidelines for low back pain and rated according to a Dutch classification system for levels of evidence (Tab. 1).

Next, the recommendations were rephrased in terms of process and outcome indicators. Process indicators, derived from guidelines, are generally phrased as the percentage of patients for whom a certain recommendation was adhered to (eg, the percentage of patients for whom the patient’s specific request for help was assessed). Subsequently, these indicators were sent to 5 experts and 20 physical therapists to assess their relevance for the quality of physical therapy care on a 5-point scale from “very relevant” to “irrelevant.”

Subsequently, the research team drew up criteria for adherence to each of the indicators, again based on the recommendations in the guidelines. Finally, the results of this procedure were discussed in a consensus meeting with the experts. This procedure resulted in 25 process indicators with accompanying criteria (Tab. 1). This procedure is expected to result in a set of quality indicators with content validity. As regards feasibility, it was decided that an indicator would only be categorized as infeasible if it had missing values in more than 25% of the cases.

Development of the EPD

To enable measurement by means of quality indicators, in cooperation with an information technology company, the researchers (G.M.R., S.D., and R.A.O.) developed an EPD that improved the quality of the patient files. For this purpose, the guidelines were specifically used to organize the structure of the EPD in a diagnostic phase and a treatment phase, each with its individual steps (Tab. 1). The quality indicators guided the formulation of the questions in the EPD, which the physical therapist used to record the findings during the diagnostic phase, the actions taken during the treatment phase, and the findings of the evaluation at the end of the process of care. The practice experience in physical therapy of the developers (4 – 40 years) helped us to enhance user friendliness of the EPD.

Algorithms were formulated to translate the information gathered during the process of care into adherence scores with the indicators. This process enabled a direct export from the data of the recording forms into a database with quality indicators. The record form also contained demographic variables, such as the patient’s age and sex and questions about work, education, and living situation. On the basis of the literature about success factors for implementation of an EPD, we added free writing space in which physical therapists could make additional notes of their process of care in their own words. The EPD was shaped in such a way that physical therapists could use it as a replacement for their patient record and complete it during the process of care (for a brief demonstration, see: https://www.fysiodesk.nl/presentatie/).

References