

QUALITY INDICATORS FOR DIABETES CARE IN PRIMARY CARE

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The quality of health care currently receives much attention. This is inevitable because care should be safe, effective, efficient, and acceptable to patients. Chronic patients such as individuals with diabetes need multidisciplinary management and rigorous follow up. The burden of diabetes is on a constant increase and primary health care workers will have to take an increasing role, ensuring that all people living with type 2 diabetes receive effective and appropriate diabetes care. On the other hand, it is well documented that there is considerable variation in diabetes care and a wide range of implementation of standards of care (1,2).

What is the best method of measuring the quality of care for diabetic patients in primary care?

Measuring the quality of care for chronic patients, individuals with diabetes in particular, is not an easy task. A trap for every quality measurement system is its focusing on what is easy to measure, while it may not be the most important aspect of care (3,4).

Outcome indicators such as clinical status of persons with diabetes, mortality or major complications are more

difficult to use because this outcome is subject to the influence of case mix and other factors outside the control of health professionals. One way of assessing quality of care is the use of quality indicators.

A quality indicator is a measurable element of practice performance for which there is evidence or consensus that it can be used to assess the quality, and hence change the quality, of care provided (3). At present, there is still no international agreement on what are or should be quality indicators, and which of them are necessary and required to assess quality performance of type 2 diabetes disease management by the individual health care provider. It is so because until recently attention has mostly been paid to the methods of guideline development for prevention, diagnosis, treatment and screening of diabetes complications, while paying less attention to the development of quality indicators. Indicators have traditionally been tagged on at the end of guidelines, more or less as an afterthought.

Wens *et al.* on behalf of the Belgian Diabetes Project Group present a study of diabetes guidelines from which they extracted a set of 34 indicators from the existing 125 diabetes guidelines. These indicators were derived upon applying the "best evidence ratio". Their attitudes were that the indicators accepted as a measure of the quality of the process of care are at the same time also intermediate outcomes for measuring final outcomes. The first step was

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“sound” evidence of the process of care monitoring or adherence to the guideline process of care. Achieving the quality of process of care is a condition of ensuring a better outcome (5).

The method used in this study was a review of the guidelines for process of care. The study tried to answer the following research question: What indicators related to type 2 diabetes mellitus have been described in the existing guidelines published since 1993, to evaluate the quality of care process and outcome? Guidelines for the process and outcome of type 2 diabetes were sought *via* scientific guideline providers and from type 2 diabetes guidelines from Belgium, The Netherlands, Germany, France, UK and Luxembourg.

According to the evidence-based “best practice”, clinical care is an essential starting point to improve the quality of diabetes care and outcomes. The “most evidence based” indicator was derived after applying the “best evidence” ratio. The guidelines were assessed independently by two researchers, K. Dirven and J. Wens. On assessment, the investigators were focused on the Appraisal of Guidelines Research and Evaluation (AGREE) instrument from the Agree Collaboration for the guideline selection (6). The research project working group distinguished process indicators from outcome indicators, based on the definitions from the book *Measuring General Practice* (7).

Process indicators yielded quality indication on the process or intervention of diabetes care: “who does what, when, and how often?” And outcome indicators yielded

quality indication on the outcome of a process or intervention of diabetes care: “which interventions should deliver which results?”.

Wens and Dirven present 34 “verified” indicators of the process of care, which are ensuring and associated with final outcome. They are classified into five diabetes management topics as follows:

- 1) Control of glycemia – 14 indicators
- 2) Early detection of glycemetic complications – 2 indicators
- 3) Treatment of glycemetic complications – 4 indicators
- 4) Cardiovascular disease – 11 indicators
- 5) Quality of life – 3 indicators

Valid indicators in these projects may be a significant first step towards the routine use of the “core indicators” for primary care diabetes service.

In this study there were some limiting points, elaborated below. Evidence collected in other health care settings cannot be simply applied in primary care. The intermediate outcomes and final outcomes are well established at the population level, through reliability prediction of the final outcome, while at the level of the individual they remain quite limited. Analysis was based on a custom population, while the elderly with multiple and complex comorbidity were not included.

A synthesis of the existing guidelines rather than the analysis of the implementation of recent concepts and knowledge is presented. The analysis of indicators of patient satisfaction was not performed.

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