

045: PERFORMANCE INDICATORS OF GENERAL PRACTITIONERS AS OUTCOME MEASURES OF A CLUSTER-RANDOMIZED CONTROLLED TRIAL IN THE LAZIO REGION OF ITALY

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Objective:

To develop performance indicators for general practitioners (GPs) involved in a cluster-randomised controlled trial (C-RCT) with the aim of assessing the effectiveness of different strategies for the implementation of an evidence-based guideline for the management of non-complicated type 2 diabetes mellitus (DM) in the Lazio region of central Italy.

Methods:

In a three arm C-RCT, 252 GPs were randomised. Arm 1 includes GPs who underwent a two-day training module and consequent administration of the guideline, arm 2 includes GPs who received the guideline without any training, and arm 3 includes GPs who continue current practice (control group). GPs' adherence to guideline recommendations for DM management was assessed through data on process of care for diabetic patients identified by the GPs recruited. Data was collected over a 12 month period. In this design, GPs are "units of measure" of the process of diabetic care delivery, as they manage laboratory and preventive care for most patients with non-complicated type 2 DM.

Two different data sources were considered. Patient's demographic and health status data (baseline information) were communicated by GPs through an on-line compilation, in order to accurately describe the diabetic population on which changes in physician's behaviour may have an impact. The second data set is based on drug prescriptions, requests for tests and for outpatient appointment visits. These data are extracted from the current information systems, which routinely assemble data for reimbursement purposes.

Patient's health outcomes were not collected. The process of care variables were considered study outcomes and were expressed as the proportions of patients with drug prescriptions, requests for tests and outpatient appointment visits. The differences between arms in their consumption of health care resources and their costs were investigated in light of the benefits resulting from the intervention.

Results:

The study outcomes were categorised into 5 groups of indicators:

- Group 1 includes glycaemic control evaluation indicators;
- Group 2 includes micro- and macrovascular complications preventive measures indicators;
- Group 3 includes indicators of pharmacological management of diabetes;
- Group 4 includes indicators of pharmacological management of cardiovascular risk factors (hypertension and dislipidaemia);
- Group 5 includes economic evaluation indicators.

For pharmacological indicators, patients were considered as previously untreated if they had no medication prescriptions recorded in the 12 months prior to the commencement of the trial.

Primary outcomes were considered:

- 1) Proportion of patients who were prescribed 3 measurements of glycosylated haemoglobin with at least two months' interval;
- 2) Proportion of patients who were prescribed micro- and macro-vascular complication assessment tests; and
- 3) Marginal cost per each glycosylated haemoglobin measurement.

Conclusions:

Data from administrative databases may be used to perform a cheap and exhaustive assessment of GP's performance and of the effectiveness of methods for influencing diabetes care process. On a larger scale, routine information systems may be useful in evaluating the long-term effects of interventions from the perspective of continuous quality improvement of health care.