## Official registrations for an evaluation-based health policy. Aspects of policy support at national, intermediary and local level

by

Aelvoet W.<sup>1</sup>

A need-driven and population-directed health policy requires a reliable health information system. Herein secondary databases may play an important part. Indeed they contribute to the assessment of the health status of the population and allow health services to be accountable for the use of the resources, placed at their disposal, and the quality and outcomes of the care they offer.

Based on the literature, a frame of reference has been elaborated to assess the quality of data laying an emphasis on the potential negative influence of the financing mechanism of the hospitals hereupon. In particular we paid attention to the phenomenon of creep, which consists in the artificially aggravating of a hospital's case mix in order to obtain a higher re-imbursement.

During the whole process of data collection and processing the data may be fraught with imperfections, errors and forgetfulness. Data quality varies over time and according to age and gender of the patient; the type of the disorder; the type of medical act (diagnosis, procedure); the use of their own data by the registering services; and, the registration system and its control mechanisms. This means that administrative data are to be scrutinized and to be handled with great care when interpreting the results of studies carried out using them.

A careful design of the registration is of the utmost importance. The assurance of the quality of the data includes the forms or screens to be used, the selection of items to be registered (such as clinical, radiological and laboratory data, ECG and medical imaging); univocal instructions; the implementation of international agreed-to classification systems and accompanying rules; the systematic collecting, processing and analyzing of the data and its monitoring in time. Comparison of the data and collaboration with other registries; creativity while validating; feedback and intensive audit; all are required, especially if the data play an important role in the financing mechanism of hospitals.

Two separate worlds seem to exist: the world of public health and the world of health services. Both have their own information system, respectively information of public health and management information. We try to restore the conceptual unity by aiming at a public health of superior health care quality.

Correspondence W. Aelvoet, FPS Health, Eurostation II, Victor Hortaplein 40 b10, 1060 Brussels, Belgium willem.aelvoet@health.fgov.be

<sup>&</sup>lt;sup>1</sup> FPS Health, Food Chain Safety and Environment, Brussels, Belgium

Having defined the concept of quality, we examined to which extent it could be analyzed using administrative data. A first approach relies on quality indicators. Successively the differential types and uses of these indicators are discussed. We also examined the potential of administrative data to identify both superior and inferior quality of care. A second approach is that of the patient safety indicators, based on adverse events. The concept of adverse event is described; sources of data are mentioned; the magnitude of the phenomenon is outlined and the limitations in the use of administrative data in that respect are reported.

We dedicated a chapter to the methodological aspects regarding the use of administrative data both to detect deviant coding practices as to identify hospitals of superior or inferior quality of care. In both cases it is about a problem of outliers. To handle these problems we made use of logistic regression techniques and corrected for multiple, simultaneous testing by the Bonferroni correction and for correlation within the data by rescaling techniques.

Quality of care is a continuous, shared responsibility between patients, care providers, hospital directions, College of physicians and professional bodies. The responsibility of the authorities, the guarantor of the community's interests, consists in supporting and eliciting quality initiatives. In our approach hospitals are considered individual structures of the health care system, consisting of services sharing a common organizational culture and certain common processes and being accountable to the community. Not the "shame, name and blame" of individuals or organizations but the identification of organizational problems was considered a starting point for quality improvement.

The main results of our analysis regarding the cesarean section rate in low risk deliveries may be summarized as follows. In Belgium important and unexplained differences in rates exist between hospitals. We found a national upward trend of 2% per semester and a per-vading medicalization of childbirth. An organized approach on local, intermediate and central level will be required to stop the rise of the cesarean section rate.

The main results of the analysis of the in-hospital case fatality rate of AMI point to the limitations of the data. The need of a univocal definition of an AMI, the completeness of the data, the traceability of transferred patients and an adequate risk adjustment draw particular attention. Some of our findings in the field of quality of care are worthy to be further examined. Although it may show difficult to interpret the between hospital differences, they seemed sufficiently important to be investigated. The transfer of patients with AMI to undergo an elective PCI requires attention as well.

Finally, although it is impossible to completely reflect the complexity of the case mix by means of administrative data, one has to realize that only this type of data allows to adjust countrywide inter-hospital comparisons for case mix.

Analyzing quality indicators led us to the conclusion that, due to the very nature of our data, which contain only information about technical aspects of care but not about interpersonal relations, we provided only a screening of and not a firm statement about quality. Therefore our feedback has been directed to the clinicians, hospital directions, College of physicians,

professional bodies and authorities. For that same reason our feedback remained anonymous.

The Neerland study showed able to restrict the potential excess of cases of congenital anomalies to an odds ratio of less than two and to have furnished sufficient evidence to exclude a worrisome situation regarding the reproductive health in Neerland. The study highlighted the need for the authorities of listening to and communicating with a community about its health risks. It made it clear that linking of data between existing registries may provide the needed information.

The difficulty of striking a balance between the common good and the right to the protection of one's privacy is common to both the case fatality rate of AMI and the Neerland study. In the first case it seems important to realize that traceability constitutes a prerequisite for the evaluation of the treatment of AMI and as a consequence for the well being of this type of patients in the future. In the second case we would never have been able to exclude a worrisome health situation without the linkage of data between registries.

Concluding, one may argue that administrative data allow to a certain extent the underpinning of a policy on all the levels of the health care system. The limitations are due to the perfectible quality of the data; to the until now almost exclusive, financial use of the Minimal Clinical Data; and, to the poor accessibility and the too restricted scope of the existing data banks.

The quality of data and hence their policy-sustaining potential will increase if the data are used in a perspective of public health, wherein quality of care constitutes an important domain. To realize this objective a constructive collaboration is required of all levels of both the public health and the health services worlds.

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