Direct patient treatment costs in the Allergology Service of a University Hospital

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ABSTRACT

Health resources are limited and consequently real cost generators must be identified to optimize resources.

In the present article, we describe the structure of the Allergy Unit of the University Hospital Virgen de la Arrixaca in Murcia (Spain), the health area in which allergic patients are attended, and the final healthcare products generated.

Based on the 2004-2005 budget, variable costing was used to calculate the costs of the healthcare products generated (first visits, subsequent visits, and diverse laboratory tests) by two of the three homogeneous functional groups (HFG), i.e., HFG of the ambulatory service and HFG of complementary tests.

The following conclusions can be drawn: *1)* the current system of variable costing provides information, which should be useful to health professionals; *2)* the real cost generators in the microcosm of daily clinical practice should be identified to allow resource reallocation; *3)* the costing system used enables modifications to be made that allow decision making on optimal use of the budget; *4)* clinical management and complementary tests should go hand in hand with a view to optimizing resources.

Key words: Allergology. First visit. Susbsequent visits. Variable costing. Hospitalization. Hospital admission. Hospital stay. Homogenous functional groups (HFG). Costs.

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INTRODUCTION

Clinical management requires having reliable information available for making decisions. Although hospitals generate a lot of data from different sources, this information, although usually accessible[1], is hardly ever used to its full extent in clinical management.

There are various reasons for this. On one hand, the information that interests professional clinicians is usually immersed in a wide series of data that is of little interest to them. On the other hand, the indicators are complex or insufficiently defined, the information is generated in different reports and at different times and, as there is no adequate way of divulging this information, it does not reach all the people involved in clinical management.

Working with closed subsystems is not recommended in healthcare centres because the information should be available to all heathcare workers.

Some authors have proposed hospital quality indicators[2-5], but they have been developed to compare the operation of different hospitals or for use by hospital management. In Spain, we already have experience in the development of indicators designed to measure quality results agreed by hospital services[6]. More recently, Sainz et al[7]. published an article whose basic purpose was to consider the development of regular indicators of general interest for the hospital and particular interest for each service, as they would be a useful working tool to aid clinical management. These indicators, using economic terminology, are called the control sheet or control table, and are a series of indicators that provide information on the degree of compliance with the proposed aims and objectives. The implementation of this control sheet and its consolidation in the hospital area enables the regular presentation of a document for each hospital service that contains indicators relating to the service and the hospital, including appropriate comparisons, and which measures whether targets are met. The application and divulgation of this tool is a stimulus for better clinical management, understood as the use of intellectual, human, technological and organisational resources for better patient care[8]. This information makes it possible for professionals to manage better and adopt measures to improve patient care[9].

Management agreements with services and units are the forebears of clinical management, and should be considered as an improvement as they foster a relationship between managers and healthcare service professionals. Everything seems to indicate that clinical management is going to be progressively implemented in hospitals, and that budget allocations will be made to different services. But it will only come where there is a well defined management agreement.

The main purpose of this study is to examine the development of analytical accounting, proceeding with the restructuring of functional units in the Allergology Service, with identification of the human resources on the level of Homogeneous Functional Groups (HFGs) and their distribution in the areas of activity of the Service, designing an organisation chart of the different areas studied and then proceeding with the divulgation of the usefulness of the tool, especially in aspects related to clinical management.

MATERIAL AND METHOD

Specification of processes

The first step to be carried out was the creation, in January 2005 and on the suggestion of the Management of the "Virgen de la Arrixaca" University Hospital, of a multidisciplinary working group to develop the following processes:

– Development of clinical management indicators.
– Definition of the selected indicators, including continuous control over them to consider the possibility of the inclusion of new indicators and the elimination of previously selected indicators.
– Development of a model document for the results of each hospital service, including the presentation of service and hospital indicators and the inclusion of appropriate comparisons.
– Creation and maintenance of a computerised procedure for the process of design and calculation of indicators.
– Specification of the flow of information through the different databases available in the hospital.
– Determination of the way to divulge these documents to the services and people involved so that the information acts as a stimulus to improve quality.
– Control by the working group of various procedures to make appropriate modifications as required in each of the individual processes.

Work schedule

The working group, after considering the problem, distributing information and bibliographic references related to indicators of health care assistance results[10] and, taking the instrument previously developed by some members of the team in the same centre as a basic working hypothesis, established an approximate work schedule before beginning discussion of the upcoming objectives agreement of the Management Contract. One member of the group was designated to carry out the negotiations with the professionals of the Allergology Service and to prepare a study of proposed specific indicators for that Service. At the same time an agreement was reached with the professionals of the Service on the restructuring of the functional units, identification of human resources on a HFG level and their distribution in the areas of activity of the Service, designing an organisation chart of the different areas studied.

In a later meeting of the working group, an agreement was reached on the indicators selected and specifications defined for the procedure of data collec-