

Bundling dialysis costs: the right option, or a Pandora's box?

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Received for publication: 02/07/2007

Accepted in revised form: 18/07/2007

■ ABSTRACT

Portugal is about to adopt a new system of reimbursement of chronic dialysis treatment, the bundling of several dialysis-related costs. The provider will receive a fixed amount of money for each patient and each period of time, regardless of the expenses incurred in treating that patient. The authors of this paper, doctors and also facilities owners, review the dangers of this new approach, namely the “skimming-off” of certain patients and the decreasing quality of the service provided. As the negotiations with government are taking place, we also mention some important issues which must not be forgotten in calculating a fair price: the extent of the dialysis centre's responsibility, the inclusion of primary care, the problems of paying for complications, the inclusion of other modalities of renal replacement therapy, such as peritoneal dialysis, pre and post-transplant patients, the problems of transportation and vascular access care and the co-payment of medicines. The goal is to reach the fairest possible bundle of health care, both from the payer's point of view and in light of the quality demanded in a developed country such as Portugal.

Key-Words:

Chronic renal disease; dialysis; health economics; prospective reimbursement; quality of health care; willingness to pay.

■ INTRODUCTION

In talking about dialysis, there is the increasing consensus that, in spite of it being one of the most rehabilitating treatments medicine can provide, costs are reaching uncontrollable levels. The problem arises from a conjunction of two facts. Firstly, it is technologically very elaborate, and thus expensive, not accessible to the individual purse and secondly, if dialysis is denied to a patient, he/she will die. Additionally, factors such as age or most concomitant diseases are currently not acceptable as *tout-court* drop-out criteria. Most national health systems in developed countries have provided a solution for these patients, increasing the economic burden of this problem. Payers complain of increasing expense. Patients and their associations demand high standards of care. Industry brings pressure to bear on using more expensive equipment and supplies, while providers have no problem in increasing the value of invoices as they work within a “pay-for-work” framework which leads to increasing expense. Another contributory fact is the vertical organisation of the most important players in this industry.

The attempts to cut down expenses have led to a solution called “bundling”¹, a prospective reimbursement, inspired by the managed care system, in which the provider receives a fixed amount of money for each patient for each period of time and has to perform dialysis on the patient and meet all other dialysis-

-related expenses within that budget. These other expenses include medicines (some of them may be more expensive than the dialysis itself), blood tests and other exams. The payer is released from these charges and pressure put on the provider on how to best manage the care of each patient. As Portugal is set to adopt such an approach to this issue and negotiations with government are underway, we, as doctors and dialysis facilities owners, thought it fitting to stop and consider what is really important in terms of defending our patients and the quality of our practice.

■ DANGERS ARISING FROM BUNDLING

The drive behind bundling dialysis costs is to control the overall budget, reducing the uncertainty of expenses. It will pressurise providers into cutting waste, releasing the payer from continuous increases in the costs of treating these expensive patients.

As the provider will have to meet expenses within a fixed budget, dangers may well arise. The first danger arising from any attempt to quantify medical care is the risk of skimming-off the “worst” patients, that is, the most expensive ones². There is an effective tendency to consider patients with more co-morbidities, or older patients, as not suitable for such treatment. When chronic dialysis began in 1962, a committee composed of a minister, a housewife, a lawyer, a banker, a state government official, a labour leader and a surgeon was given the task of deciding which applicants were to be admitted to the kidney centre. The committee, whose members remained anonymous, came to be known as “God’s Committee”³. A study by Hörl *et al.*⁴ demonstrated clearly that in countries where dialysis is mainly private, the incidence of new patients on RRT is higher than those where it remains in the public domain. It is not possible to define by law who is and who is not to be treated, nor who will die without this treatment. If a rule were to be created, it could not be decided in the office, in front of each particular patient. It must be universal and based on principles rather than specific cases. It is very important that country-wide criteria be consistent, so that a patient in one area does not have more opportunities than another elsewhere.

This subject leads to the concept of “willingness to pay” for medical care⁵, the line that divides what is and is not good value for money, the limit of cost-effectiveness. How much are we, as tax payers, willing to pay for the health of our co-citizens, who may sometimes be a family member or even ourselves?

The second danger to be aware of is the risk of decreasing quality of care. As the patients are not capable of correctly assessing the appropriateness of the technical acts performed inside a dialysis centre, only the relationship itself, the ethical and professional attitude of doctors and nurses, can guarantee that the patient is being treated according to state-of-the-art rules. Guidelines are very useful in this context, as are result goals concerning the percentage of patients that meet defined criteria (dialysis adequacy indexes, lab tests, rates of mortality, rates of arteriovenous fistulae, etc). These criteria act as a form of pressure on doctors to make every effort to reach those goals, as they are also accessed by their employers, and also for companies to provide all the resources they can to make that success possible. In our opinion, it is wise to decide that only those who meet these criteria deserve a bonus payment of some kind. In contrast to other areas of business, there is no competition for patients between facilities based on quality, because there is a monopsony (i.e. a sole payer/buyer) and regulations state patients will undergo dialysis at the facility nearest to their homes, as the National Health Service also pays for transportation. Because of this, there is no stimulus for quality increase beyond the ethical attitude of the professionals.

■ ISSUES TO CONSIDER WHEN NEGOTIATING REIMBURSEMENT

The first aspect to consider is the centre’s scope. Currently, the payment of dialysis treatment, medicines, lab tests, radiographies, transportation, vascular access and almost all other medical expenses incurred by a dialysis patient are billed separately by the provider in each area. This means that there is almost no limit to the exams that can be performed, or the medicines to be taken. At the limit there is a lot of waste, which is the main impetus behind changing this situation. The consequence is that in many cases, the patient stops going to his/her

general practitioner because he/she is seen by the dialysis doctor thrice a week and his/her nephrologists at least once a week. In many clinics almost all his/her healthcare needs can be met there.

Changing the paradigm will impose limits on this practice. If the scope of payment is "treatment of renal disease", other aspects of this patient's health will have to be managed elsewhere, as there will be no budget allotted to their coverage. For example: general vaccination, a Papanicolaou smear, a mammography, or oncologic screening are not aspects of the "treatment of renal disease". Even most aspects of diabetes care do not fall within that scope. Considering the increasing number of diabetics, this fact can become a serious problem. This issue is not new and has been dealt with elsewhere⁶.

Patients are already seen by dialysis doctors three times a week and have specific problems that other doctors are not so aware of. In fact, patients do not want to go to the Health Centre on their day off dialysis, understandably so. Wouldn't it be wise to include this kind of care in the bundle? Currently, with the recent creation of family health units, it is possible to quantify the capitation for general health care for the general population. All that would be needed is to add this amount to the amount calculated for the treatment of renal disease and release these patients from the health centre. It would make room for many people who currently do not have a general practitioner. It must obviously be ensured that the dialysis centre has Family Health specialists so that every aspect of primary care is guaranteed.

Somewhat different are hospital admissions, mainly those unconnected to this pathology. While a bone fracture, for example, could be related to renal disease, it could also be related to other causes. How to tell? There are dozens of causes of abdominal pathology. Is it fair to include all of them in the bundle? Wouldn't this turn dialysis clinics into general hospitals or, worse, into insurance companies, deviating from their original role inside the National Health System? It is our opinion that all complications should stay outside the bundle of dialysis care, currently paid directly by the Regional Administration of Health to the hospital where the patient has been admitted, according to the general rules of Diagnosis-Related Groups (DRG).

However, the treatment of a given complication often extends beyond the admission period. For example, the treatment of a catheter-related sepsis could last several weeks. After the acute phase, there is no medical reason why the patient should stay at the hospital. Yet the antibiotics are often exclusive to hospital use and some may be expensive. Is it fair to include this complication-related "post-discharge" treatment in the bundle? If so, why only this and not all of them? Some hospitals supply the antibiotics for that period based on the argument that it is their obligation to treat the complications of RRT and it would cost them less if they discharged the patient earlier, provided that continuation of treatment and medical accompaniment were assured. All the aspects of this transmission of responsibilities must be clearly defined.

Another issue is the modality of treatment. Considering that dialysis is one of the options of the treatment of the fifth and final stage of chronic kidney disease, it might be wise to consider the other stages, whenever possible. Dialysis facilities are part of a national programme of regular haemodialysis, conceived in the 1970s to meet the needs of the population which NHS hospitals could not. They have performed wonderfully, allowing the National Health Service to invest in other areas of health care, namely kidney transplantation, for these same patients. In Portugal, it is currently cheaper and safer to be on dialysis treatment at these private facilities than in NHS hospitals. There are other aspects of CKD treatment that might also be included in the attributions of these institutions, such as peritoneal dialysis and treatment of stages 3 and 4 CKD. The former is recognised as being underused in Portugal and this might be a way to increase its usage. The inclusion of the latter would have the advantage of allowing access to nephrologists at earlier stages, as is widely demonstrated by literature. In this way, anaemia and renal osteodystrophy treatments could begin earlier, as well as timely construction of vascular access, blood pressure control, allowing better slowing-down of the progression of kidney disease, as well as treating cardiac disease, early vaccination or referral to a transplant waiting list.

Furthermore, from the provider's point of view, those patients would be worthwhile as they consume fewer resources, thereby increasing profit margins. The payer in its turn might well use that as an argument

to lower the average price of the bundle, lessening the overall burden of these patients. At least this model would have the advantage of allowing the patients to be followed by nephrologists from early stages onwards, precisely the very same ones who will be responsible for them afterwards. It is an issue to consider.

Another area of action which could extend the scope of the responsibility is the follow-up of transplanted patients after a 3 or 6 months post-transplantation period. It would be wise to keep a compulsory link to the transplanting centre. The pitfall of this idea is the high cost of medicines, blood tests and exams that make these patients undesirable to providers other than those who performed the transplant surgery itself.

The preparation for renal transplantation is also a matter of concern. It is without doubt a goal to pursue. There are expensive exams and lab tests to be performed during that screening but, apart from some standardised exams and lab tests, there are many others, the most expensive, which are the responsibility of the transplant centre, so it is unfair to charge them to the centre where the patient is regularly dialysed. It is, therefore, our opinion that preparation for kidney transplant should stay outside the bundle. However, the number of patients on waiting lists should be kept as a quality performance index.

There is a question to which an answer must be given before surprises arise: the issue of co-payment of medicines. The general rule both for hospitals and health centres is that the amount of money the patient does not pay at the pharmacy is charged back to the institution where it was prescribed, deducting it from the total invoiced value, following the general “prescriber/payer” principle. It is mandatory to clarify these rules, and correct the price of the bundle accordingly, so that it reflects a fair price for the services effectively provided to the patient.

An important subject related to this is transport. It has been suggested that transport to and from dialysis might be included in the bundle. There are two problems related to this. Firstly, the distance from patients’ homes to clinics is not uniform, making it unfair to calculate an average reimbursement value for this item. While in bigger cities distances are shorter

and cheaper, in rural areas the longer distances make it impossible to cope with an average price calculated from a national or even regional sample of patients. Secondly, and very importantly, as the NHS is an external payer who decides where each patient goes to dialyse, based on transport costs, it is also the sole guarantee that there is no dispute of patients, nor hidden games, because patients are distributed according to their addresses.

Finally, the most difficult subject to include in the bundle is related to vascular access. The problems arise from the fact that there is no uniformity of practice. It is, therefore, very difficult to design a model which fits the different practices in different regions of the country. Strategies are used according to the facility where each type of access is to be achieved, which varies across regions and hospitals.

It is established that arterio-venous fistulae is the preferential vascular access, but the number of patients for whom this is not possible is increasing. So, second and third fistulae, catheters, grafts, their maintenance and interventions to prolong access are issues of concern. Several procedures can be included in the bundle, depending on the payers’ “willingness to pay”: mapping of vascular territories, construction of accesses, thrombolytics in catheters, surgical desobstructions of grafts, antibiotics for access infection, fistulae angioplasties, access imaging, thorax vessels imaging and Tenckhoff catheters placement are some of the aspects to be considered in a negotiation. Should they fall completely within or outside the centre’s responsibility? If so, who pays for the first access, usually done before the patient is attributed to an out-patient centre? Another point to consider is that the centre is only responsible for some aspects of vascular access. A decision must be made, which may give rise to unfairness in borderline situations. The hard part of it is that we do not have one single national strategy to deal with vascular access. It would be wise and fair if exams or procedures that can be performed outside a hospital entered the bundle, releasing the hospital for other tasks it performs better. Another characteristic of vascular access is the difficulty of predicting its evolution, making it hard to set a fair price for this service. It is mandatory to firstly define the right policies, calculate a fair price for them, and finally include this vascular access issue in the bundle.

An alternative way of looking at the problem, from the payer's point of view, is to have quality as a goal and have differentiated payments for achieving pre-defined goals. It has been proposed elsewhere⁷ and it takes a lot of work to implement.

FINAL WORDS

The issue of bundling dialysis expenses is a controversial one, mainly because of uncertainty and lack of knowledge of its boundaries. Before going further, it is mandatory to define what we, as doctors, want for our patients and turn that into the definition of standard care, so that a fair price can be calculated for that work. It will probably be the last definition entirely made by doctors, to which economists, managers and politicians will be obliged to stick. After it is done, the subject of discussion will be prices, profit margins, ways of spending less, indexation of salaries and cost-effectiveness analysis, with medical autonomy to some extent lost.

Our job is to treat patients, but a modern view of our profession adds to the classical functions; the obligation to fight for the best resources for its success, considering the sustainability of the system. We are the only professionals able to conciliate these apparently opposing issues. This is the time to show what conditions we think are essential for maintaining the level of excellence our patients are used to. It is time doctors worried about economics.

Conflict of interest statements:

Dr. Serafim Guimarães has shares in an independent dialysis facility (Caledial), of which he is medical director, and also works as a nephrologist for Fresenius Medical Care.

Dr. Alfredo Loureiro has shares in a network of dialysis centres (Uninefro), some of which have a partnership with Fresenius Medical Care. He is also representative of Uninefro at the Board of Medical Directors of Fresenius Medical Care Portugal.

Dr. Vasco Miranda has shares in a network of dialysis centres (Nefroserve) some of which have a partnership with Fresenius Medical Care and he is medical director of a dialysis facility belonging to Fresenius Medical Care.

Acknowledgement

The authors wish to thank Mr. Shrikesh Laxmidas for the English language review and corrections made to the text.

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