



Implementation of DRG Payment in France: Issues and recent developments[☆]



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ABSTRACT

In France, a DRG-based payment system was introduced in 2004/2005 for funding acute services in all hospitals with the objectives of improving hospital efficiency, transparency and fairness in payments to public and private hospitals. Despite the initial consensus on the necessity of the reform, providers have become increasingly critical of the system because of the problems encountered during the implementation. In 2012 the government announced its intention to modify the payment model to better deal with its adverse effects.

The paper reports on the issues raised by the DRG-based payment in the French hospital sector and provides an overview of the main problems with the French DRG payment model. It also summarises the evidence on its impact and presents recent developments for reforming the current model. DRG-based payment addressed some of the chronic problems inherent in the French hospital market and improved accountability and productivity of health-care facilities. However, it has also created new problems for controlling hospital activity and ensuring that care provided is medically appropriate. In order to alter its adverse effects the French DRG model needs to better align greater efficiency with the objectives of better quality and effectiveness of care.

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1. Policy background

Diagnosis-Related-Groups (DRG) based payment, which links hospital funding to activity, has become the most common mode of hospital payment in the industrialised world over the past decade [1]. This type of prospective payment, based on the theoretical model of “yardstick” competition, encourages hospitals to improve the use of their resources and to optimise care organisation for improved efficiency [18]. It can also contribute to

enhancing quality if these changes improve the clinical process and case management. However, despite common basic principles, DRG-based payment models can vary significantly in their architecture and implementation across countries. The accuracy and consistency of the patient classification and costing methods together with the underlying incentive structure are essential for the success of the DRG-based funding, and for the realisation of policy objectives [20].

In France, a DRG-based payment system (called T2A, *Tarification à l'activité*) was introduced in 2004/2005 for funding acute services in all hospitals. The major objectives of the reform were improving hospital efficiency, creating a ‘level playing field’ for payments to public and private hospitals and improving the transparency of hospital activity and management. The need for greater transparency and efficiency with better and more autonomous management

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in public hospitals has long been recognised by most stakeholders. Until 2005, funding arrangements for public and private hospitals were complex with different rules. Public hospitals had global budgets, mainly based on historical costs. Private-for-profit hospitals, which provide more than half of all surgery and one fourth of obstetric care in France, had a complex itemised billing system complimented with fee-for service payments [19].

Both public and private hospitals initially supported the introduction of DRG-based payments. Global budgets were considered as a rationing instrument by public hospitals and it was expected that activity based payment (ABP) would reward more dynamic hospitals. Private hospitals saw the new system as an opportunity for improving their market share. However, this initial consensus on the reform has faded during the implementation. Several features of the French DRG-model have been criticised and, in 2012, the then newly elected Minister of Health recognised that the French model needed to be modified to better deal with its adverse effects.

The paper reports on the issues raised by the activity-based payment in hospital sector in France and provides an overview of the main problems with the French DRG payment model. It also summarises the evidence on its impact and presents recent developments for reforming the current DRG model.

2. Issues in adaptation and implementation

In the public sector (public and private not for profit hospitals), the share of activities covered by DRG payments increased gradually: 10% in 2004, 25% in 2005 and reaching 100% in 2008. In contrast, private for profit hospitals have been paid entirely by DRG payments since March 2005. The major features of the French DRG payment model and the issues raised in implementation are discussed below.

Patient classification. The patient classification system used (GHM, *Groupe Homogène des Malades*) initially inspired by the US Health Care Financing Administration classification (HCFA-DRG). It has been modified three times since the introduction of T2A, passing from 600 groups in 2004 to about 2300 in 2009 with four levels of case severity for most GHMs [19]. Continuous modifications of the classification created confusion and reduced the comparability of the results of the payment system from one year to the next. Moreover, the economic pertinence of the latest classification has been questioned, as some groups are based on a very few cases per hospital. It has also been shown that 40 GHM covers more than half of all hospital cases in France [14].

Cost Data. Reference costs are calculated on the basis of an annual national cost study (ENCC) which is carried out separately for public and private hospitals. ENCC provides detailed cost information for each hospital stay from selected hospitals which provide data on a voluntary basis and according to a detailed standardised accounting model [19,23]. Until 2006, the ENCC covered only public and private-not-for-profit hospitals. The number of participating hospitals has increased regularly, including private-for-profit hospitals, from 44 in 2005 to 110 in 2012, representing about 16% of hospital cases. However, until

2010, the reliability of the cost database has been an issue. Moreover, the methods of calculating reference costs and the lack of information explaining the cost data have been criticised severely by the Inspection of Finance [14].

Price setting. The DRG prices (tariffs) are set annually at the national level using reference costs separately for public and private hospitals. However, the Ministry of Health sets the final prices taking into account the overall budget (expenditure targets) for the acute hospital sector and national health priorities [23]. Therefore, reference costs are modified in a complex and opaque way to compute final GHM prices each year. Tariffs are different for public and private hospitals. Moreover, what is covered by the price differs between public and private sectors. The tariffs for public hospitals cover all of the costs linked to a stay, while those for the private sector do not cover medical fees paid to doctors (paid on a fee-for-service basis) and the cost of biological and imaging tests which are billed separately. The initial objective of achieving price convergence between the two sectors, which started in 2010 with about 40 selected GHM was stopped in 2013 as a result of strong criticism from public hospitals.

Generally, the difficulty of understanding the link between reference costs and prices irritated hospitals as it made it difficult to predict the evolution of prices and their budget situation from one year to the next [15]. Moreover, the ambition of price convergence, which was supported by the private hospital federation, has created tension. In practice, convergence meant price reductions for public hospitals and steady prices for private ones since tariffs are based on average costs in areas where the private sector had a competitive advantage (ambulatory surgery) and already had a profit margin [11].

Additional payments. Public hospitals receive additional payments to compensate for specific 'missions', including: education, research and innovation related activities; activities of general public interest such as meeting national or regional priorities (e.g. developing preventive care); and the financing of some investments contracted with the Regional Health Agencies. The costs of maintaining emergency care and related activities are paid by fixed yearly grants, plus a fee-for-service element taking into account the yearly activity of providers. Finally, there are retrospective payments, covering full costs for a restricted list of expensive drugs and medical devices.

While there has been progress in improving transparency of allocations for education and research activities with DRG-based payment, the calculation of budgets to finance "public missions" appears to be problematic. The private sector claims that this budget is used as a mechanism to cover actual efficiency deficits of public hospitals, while public sector hospitals ask for better evaluation (costing) of the value of their specific missions. The expenditure on these budgets (MIGAC) increased by 30% between 2007 and 2010 against a 9% increase in expenditure linked to activity over the same period [8].

Expenditure control. To contain hospital expenditure, national-level expenditure targets for acute care (with separate targets for the public and private sector) are set by the Parliament. If the actual growth in total volume exceeds the target, prices subsequently go down. Evolution of activity

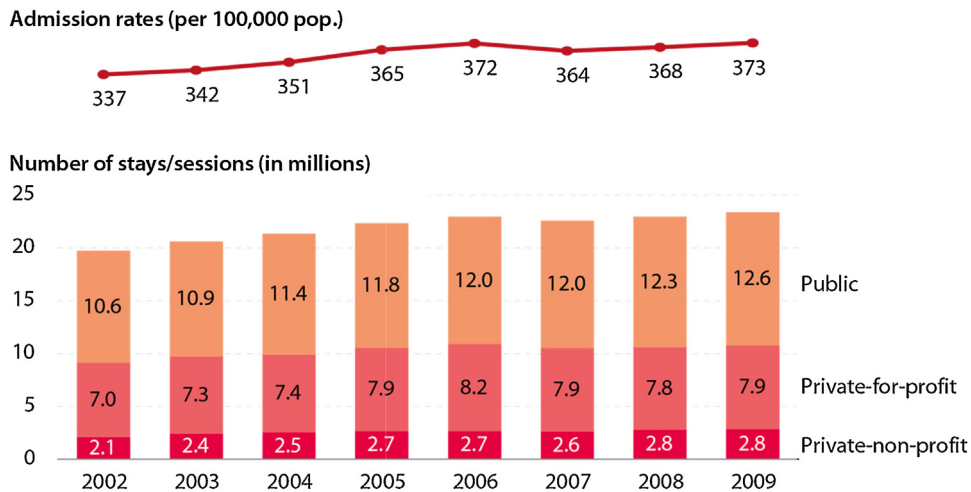


Fig. 1. Evolution of hospital volumes by sector (number of cases).

PMSI Hospital statistics, Or et al. [7].

volumes is not followed at individual hospital level but at an aggregate level (public sector, private sector). Therefore, GHM prices are set as a function of global changes in hospital activity, (increasingly) independently of costs and their evolution at the hospital level.

This macro-level regulatory mechanism created an opaque environment where it became very difficult for hospitals to predict their budget situation for the next year as prices change every year as function of overall activity. The lack of information on the specific objectives pursued with payment policy also created frustration and resentment about T2A at the provider level [21,29]. In the absence of clear price signals and lack of cost data for benchmarking hospitals, providers appear to be concerned mainly by balancing their accounts [22].

3. Monitoring and outcomes

Like any form of payment, DRG payments may induce undesirable behaviour by providers, adverse effects that have been widely described in the literature [2–4]. The selection of patients, up-coding of severity levels, premature discharge of patients are opportunistic behaviours often mentioned in the literature. In addition, the efficiency sought at each hospital level may not always be compatible with the overall objectives in terms of allocative efficiency and value for money. To maximise revenues, hospitals can increase activity that is little justified and alter the composition of care by abandoning certain activities deemed unprofitable.

Available data suggest that overall hospital activity (number of cases treated) has grown regularly (Fig. 1) since the introduction of T2A [5,6], although public and private hospitals followed different strategies [7]. In public hospitals both the number of cases treated and case-mix adjusted production have increased significantly between 2004 and 2009, and for all types of activities (medicine, surgery, obstetrics), with a more striking increase in surgery. In private-for-profit hospitals, a strong increase of

ambulatory procedures and surgery was observed simultaneously with a reduction in full-time hospitalisations in surgery and in obstetrical and medical cases. While public sector has improved its market share in surgery, the private sector (specialised traditionally in elective surgery) remains the main producer of outpatient surgery. In 2009, 62% of ambulatory surgery was performed by private-for-profit hospitals.

Globally, there seems to be some positive change in public sector productivity. The number of public hospitals in deficit has been going down [8]. Average length of stays went down, in particular for surgery with the development of ambulatory surgery while the reduction is less pronounced for medical and obstetric cases (Fig. 2). In public hospitals, technical efficiency may have also increased: there has been a significant increase in case-mix weighted production between 2005 and 2009 while the number of total hospital staff rose only modestly [7,16]. In contrast, in private-for-profit sector the level of weighted production has slightly decreased due to the contraction in inpatient hospitalisations (weighted more in the production index). In all sectors, better activity coding and changes in coding habits (optimisation of co-morbidities) could have

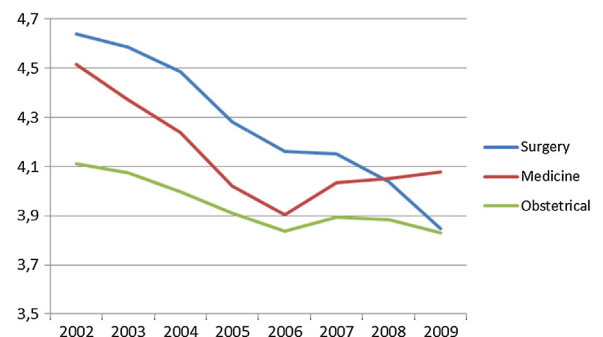


Fig. 2. Average length of stay (days) for surgery, obstetrical and medical cases. Or et al. [7].

an impact on the higher production index. However, the growing gap between the public and private sectors in production index (since 2007) indicates different case-mix trends between the two sectors [7].

DRG creep. Since the classification of patients into DRGs determines hospital revenues, strong perverse incentives exist for hospitals to “optimise” their coding practices. In 2006, a year after the introduction of DRG payments, controls from the Health Insurance Funds demonstrated that up-coding of some outpatient procedures as day cases was a real problem [9]. This problem was solved in 2007 by a decree describing those procedures carried out on an outpatient basis which should not be coded as day cases. Moreover, external data quality checks carried out at the regional level showed that a large number of hospitals either intentionally up-coded patients or inadvertently classified patients incorrectly. Between 2006 and 2009, three quarters of hospitals were audited at least once and, among these, half more than once. In 2006, more than 60% of inpatient stays (more than 80% for ambulatory episodes) had some kind of coding error or inconsistency in procedures billed [10]. If intentional up-coding is detected, hospitals may be liable for financial penalties of up to 5% of their annual budgets. The revenues recovered from these penalties amounted to €51 million in 2008 and €23 million in 2010 [8].

Quality. There is no specific adjustment for quality in DRG payments in France. In several countries adjustments are made, in particular to control for readmission rates considered as a relevant indicator of hospital quality, since payments per case/stay do not give any incentive to prevent readmissions. A recent study suggests that 30-day readmissions rates for common medical conditions such as strokes and myocardial infarction but also colon cancer and hip surgery have increased over the period 2007–2009 [7]. Nevertheless, in-hospital mortality rates at 30 days, for the same conditions show a steady decline between 2002 and 2009, as in other European countries.

Induced demand. It is difficult to prove what is “justified” and what may be induced demand. Some of the increase in activity can be explained by the increasing demand due to population ageing and dissemination of new interventions but also by the improvement in coding hospital activity [24]. However, the strong increase in the aged standardised rates of elective interventions/procedures which are profitable (such as cataract, endoscopy) compared with the rates of hip replacement, a heavy intervention difficult to induce (as a benchmark), is suggestive of induced demand that may be little justified [7].

4. Recent developments

In 2009, the Auditor's Office [12] pointed out that: (1) DRG-based hospital payment has become a very opaque mechanism of cost control for managers and local regulators; and (2) the follow up of hospital resources, costs and quality was insufficient. In 2012, several national auditing institutions have criticised the French DRG-based payment model [13–15]. In addition to the necessity of improving transparency of price setting and modifying macro-level control mechanisms, they pointed out the

need for simplification of the system (including the classification), better communication with public hospitals and better monitoring of results.

At the end of 2012, the Minister of Health set up a formal commission to reform the French DRG system [25,26]. The commission works in four areas for improving the current model. First, it is increasingly recognised that tariffs should reflect the costs of efficient providers. Where relevant, DRG prices are aligned with the tariffs for ambulatory surgery. There are also suggestions for adjusting tariffs, where possible, on the basis of efficient providers [27]. Unfortunately, hospital cost data is currently not used/published for benchmarking or for identifying efficient providers, in order to facilitate an understanding of the differences in medical practices and to monitor changes in behaviour of various actors. Therefore the size of the potential efficiency gains cannot be established.

Second, the commission proposed to supplement activity-based payment with quality-based funding, in particular in areas which may be under-invested (patient follow-up and coordination, patient safety, etc.). The pilot model, tested over 2014/15 in about 220 voluntary hospitals, plans to finance up to 0.5% of hospital budget based on a series of quality indicators [28]. The idea is to reward both the results and the “effort” taking into account the progress made over time. However, the vast majority of the indicators concern care organisation. Major outcome indicators such as readmission rates and mortality after surgery are not monitored; information on patient experience is not collected either.

Third, the appropriateness of services provided under the DRG system is being increasingly questioned [15]. DRG-based payment can foster the development of hospital activity, sometimes beyond what is medically necessary. Assuring the appropriateness of care has become a policy priority, with several institutions tackling the issue. The High Health Authority (HAS) started to work on developing clinical guidelines for selected surgery and/or treatments in hospital. The variations in hospitalisation and surgery rates across hospitals and regions are also being followed up more closely now. There are plans to move towards a more contractual approach with providers, giving clear volume/price signals for specific DRGs. The objective is to refine the current macro-level regulation system with explicit volume targets for some interventions for which DRG prices would go down once the target is reached.

Finally, it is recognised that DRG payments, in their basic form, do not encourage an improvement in care pathways and may not be optimal for paying for patients with chronic illnesses. There are plans to extend payments beyond acute hospital care and bundling payment for rehabilitative services. In 2014, two chronic conditions (chronic renal insufficiency, radiotherapy in breast and prostate cancer treatment) will be tested in regional pilots. The idea is to pay for the overall treatment rather than for each “session of treatment” as is the case today.

5. Conclusion

Overall, the French experience suggests that DRG-based payment provides opportunities for enhancing efficiency

and transparency in hospital markets but also present risks. DRG-based payment addressed some of the chronic problems inherent in the French hospital market and improved accountability and productivity of health-care facilities. However, it has also created new problems for controlling hospital activity volumes and ensuring appropriateness of care. In order to alter its adverse effects the French DRG model needs adjustments to better align greater efficiency with the objectives of better quality and effectiveness of care. For this, availability of a strong information system for monitoring both costs and quality of hospital services is essential. Furthermore, it is necessary to make better use of the available data and information for benchmarking cost and quality in order to identify efficient providers and disseminate good medical/organisational practices. This needs to be backed up by flexible and transparent governance which supports continuous fine-tuning of the incentive structure.

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