PAYMENT BY RESULTS – GERMAN LESSONS?

By Colin Dunn and Suzanne Tracey

Introduction

With radical changes to Tariff Structure and major shifts in Market Forces Factors late last year and now a twelve-month delay in its application to all but Elective Services, "Payment by Results" in England has not had a smooth take off. Colin Dunn and Suzanne Tracey look for lessons from Germany who are also implementing a DRG based system for funding hospitals. In particular the aim of the visit was to look at financial risks of implementing such systems and how these are being managed.

Different Problem: Same Solution?

Until 2003, German hospitals negotiated their income budget with the health insurance bodies principally on a per diem basis. Furthermore, unlike UK hospitals, German hospitals are not funded to provide out-patient or day case services – which are provided by separately funded bodies (and which employ their own specialist medical staff). These funding arrangements have arguably encouraged and sustained an inefficient high level of in-patient capacity (6.3 beds per 1000 population in Germany **v** 3.9 in the UK) and longer lengths of stay (9.3 days **v** 7.0 days). Some comparative statistics for the German and UK healthcare systems are presented in the table[1] below

Table 1

	Acute Beds per 1000 pop^n	Length Of Stay	Occupancy	In-Patient Cases per 1000 pop^n	Total Staff per Bed	Nurses Per Bed	Healthcare Expenditure % GDP
UK	3.9	7.0	84%	147	5.7	1.8	7.6%
Germany	6.3	9.3	80%	205	1.6	0.6	10.7%

In order to incentivise efficiency and improve equity in distribution of resources, Germany is introducing a system of "performance oriented payment" – funding case mix weighted activity using Diagnosis-Related Groups (DRGs).

Although the UK NHS is relatively economical, quality and outcomes have been relatively poor and the challenge in the UK is to channel growth in NHS funding into improving those, rather than into increased costs and reduced efficiency.

With a total healthcare spend of 10.7% of GDP and an economy, which has seen only low levels of growth in the last few years, the challenge for Germany, is to drive out unnecessary capacity and cost. The structural separation of hospital and out-patient services remains, at least for now, and arguably continues to provide a disincentive to

[1] courtesy of Professor Karl Lauterbach, Director, Institute of Health Economics and Clinical Epidemiology, University of Cologne.

migrating in-patient to lower cost day case and out-patient models of care. For example, a patient with worsening diabetes is twice as likely to be hospitalised in Germany than in England. Nevertheless, the introduction of DRG rather than day rate based funding in German hospitals is widely expected to reduce the overall need for bed capacity to such an extent that a proportion of Germany's 2,200 hospitals will need to close. German hospitals will increasingly compete for patients in order to maximise utilisation of capacity – there will clearly be winners and losers.

Similarly, the implementation of PbR and patient Choice in relation to English hospitals, coupled with encouragement for the independent sector to occupy a much larger share of the NHS market, will create powerful pressures to improve quality and efficiency. Few doubt that this is the way to go. The risks of unintended consequences are however high, in particular the potential destabilising effect on hospitals and funding bodies of:

- the transition to HRG/DRG tariffs;
- changes to tariff and tariff structure; and
- changes in activity levels.

So, two very different starting points but the same solution – Performance Orientated Payment/Payment by Results. The UK classification is, of course, Health Resource Groups (HRGs) but the principles are identical. Both systems incentivise improvements in the utilisation of hospital resources and increase competition. The English system, however, has added incentives for PCTs to transfer work to alternative settings, since they (unlike Insurers) are also providers of healthcare.

Germany introduced the DRG system in 2003 with an expanded scheme in 2004. What lessons can be learnt from Germany's experiences to help minimise the financial risk?

The risks associated with transition have been similarly anticipated in both countries. As in England, convergence between existing rates and DRG rates is being phased in. By 2007, well over 90% of German hospital income will be driven by DRGs – a very similar picture to that in England. There are marked contrasts in the approach to tariff structure and uplift however.

Setting the tariff

To set and develop DRG classifications and tariffs Germany has established InEK – a non-for-profit body that is jointly owned by the Health Insurance Bodies and the Association of German Hospitals. Whilst it may seem strange to NHS staff that this function is not undertaken by a Government department, there are advantages in terms of joint input and ownership of the results.

The German classification system was developed from the Australian version but has been significantly expanded and refined by InEK. To calculate tariffs 144 of the 2,200 German hospitals voluntarily submitted data detailing the actual costs of 2.9 million individual cases (approximately 16% of the overall total cases treated in 2004). Whilst German hospitals submit performance and morbidity data to a central database, they are not currently mandated to submit such detailed costing data. This voluntary submission has been driven by hospitals themselves wanting tariffs to accurately represent the costs of treatment. Having established a system of 824 DRGs with 71 additional fees, InEK has incorporated a process whereby all parties are able to propose new DRGs and other refinements to the system so long as these changes result in reduced variability in the HRG and do not detrimentally impact on 50% of hospitals.

The contrast between the two systems is even more marked in relation to annual inflation uplift, reflecting the different starting points in terms of relative efficiency, quality and current macro-economic conditions. In England, of course, HRG prices are increased by inflation plus recognised cost pressures minus a percentage for efficiency. In Germany DRG prices have been increased by much smaller percentages forcing even greater improvements in efficiency. German hospitals would be jealous of NHS funding increases, although most of the difference can probably be explained by differential changes in pay costs.

This leads us to another interesting comparison ie the issue of regional variations in costs. In Germany DRG rates vary only between the 16 states; based upon their particular economic factors. Although this sounds similar to the English system of Market Forces Factors (MFFs), the variability (except between the old East and West Germany) is apparently far less than the range of English MFFs. Furthermore the changes in MFFs announced late in 2004 caused significant percentage income increases/decreases for English hospitals. Not only is the variance in English MFFs difficult to understand but also such volatility adds considerably to uncertainty and financial risk. Would the English NHS be better adopting a less variable, more transparent, system for regional market forces adjustments to tariff? We would suggest that this is an area where more research is warranted.

Managing the Uncertainty of Fluctuating Activity Levels

Arguably the biggest risk of Payments by Results for English hospitals is the move to a system where hospitals are reimbursed only for the level of actual work undertaken against a background of policies, which will shift activity out of hospitals over the next three years. How have German providers coped with the uncertainty of activity levels? The answer is that income under the German system is less volatile than under UK PbR.

Under the German system, there is an agreed level of DRG activity between hospitals and their main Insurers each year. If this agreed level is exceeded, only 35% of the full additional DRG income is payable within the first year. Conversely, if the agreed DRG activity level is not reached, the hospital is required to pay back 60% of the under-achievement. In other words, under or over-achievement is adjusted marginally rather than at full cost. This level of performance is then taken into account in negotiating the agreed level of activity for the following year. In addition to smoothing the financial impact of activity changes on hospitals, such an arrangement of course also protects the funding body from sudden increases in activity. This might also allow time for suspicions of inappropriate coding behaviour to be investigated.

<u>Costing data and Hospital Efficiency</u>

Given the pressure for increased efficiency in hospitals, which the new systems bring, it was particularly interesting to seek to learn practical lessons from a hospital, which was responding to those pressures.

We visited Maria Hilf Hospital in Mönchengladbach. Mönchengladbach has a population of approximately 260,000 – but four hospitals where, in England, there would typically be one general hospital. Two of the hospitals, including Maria Hilf, are owned by the Catholic Church; one is owned by the Protestant Church; and the fourth is state owned. This configuration is not atypical. Setting aside private hospitals, which account for less than 10% of bed capacity, approximately half of German hospitals are church owned. This does not, however, mean that they are church subsidised – their running costs, including capital charges, are funded by the Health Insurance Funds in future by DRGs. They will therefore experience the same commercial pressures as State hospitals and are already considering rationalising their estate (which is currently spread across three sites).

Perhaps the most powerful advice we received was that to manage effectively under a DRG type reimbursement system, <u>hospitals need to implement detailed patient level costing systems</u>. For each patient the system holds a detailed "bill" of services utilised eg 2 Days ITU; 3 Days General Ward; Endoscopy x 2; X-Ray x 3; Drugs etc. Had this been America, it would have been no surprise – such billing systems are obviously necessary where patient billing is at this level of detail. It must be remembered, however, that in Germany, detailed billing is not required, either under the old system, or under DRGs. Why then, you may ask, had the hospital been convinced to invest in such a system? The answer is that it facilitates comparison of income with expenditure at both a departmental and DRG level and thereby drives efficiency.

One of the most notable differences between the two systems is the level and sophistication of national costing information available to hospitals. In Germany, InEK provides a standard breakdown of each DRG price. This means that a hospital can compare its actual DRG costs with its DRG income on an on-going basis during the year and it can do this at departmental level – it does not have to wait until it does its annual costing return. In England, it is notable that the annual costing returns are not used to facilitate departmental cost comparisons.

At Maria Hilf this information is used to drive hard efficiencies from the system. Management meet every month with each department, with all clinicians in attendance. Reports that can drill down to specialty, department, DRG and even if required individual patient, analyse actual performance against standard DRG profile and reasons for variance identified. It was stated (and this was later confirmed by a Senior Clinician) that Clinicians had quickly come to own these results. The system was powerful in terms of clinical information as well as cost performance. Significant savings in bed days were demonstrated by the system over the last two years; which had allowed more activity and income to be attracted into the hospital. Each department of the hospital is held responsible for its own performance using the system. Clinician ownership is aided by coding by doctors rather than dedicated clinical coders, although the hospital acknowledged the difficulties of ensuring that doctors are fully trained in the 'rules of DRGs'.

There are important implications here not only for hospital Trusts but also for the way the NHS system could be improved.

Hospital Trusts will need to improve their information systems and clinician ownership of information. They would however be greatly aided in this by two things.

Firstly, it would be helpful if providers of HRG costing software developed products and functionality to help manage costs rather than merely meeting Department of Health requirements.

Secondly, it would help hospitals to identify areas of high cost if the Department of Health system for collating HRG costings was used to feed back information on the national average ingredients of those costs rather than just total costs for each HRG. Initially an overall unit department cost comparison could be developed, but ultimately a breakdown of each HRG price into say, theatre costs, inpatient stay x bed rates, drugs etc would be extremely powerful in identifying and driving out inefficiencies.

Summary

In summary, despite differences in starting points the German and English systems have similar objectives and similar approaches. Both are adopting a system of DRG/HRG reimbursement of hospitals to drive efficiency and both face consequent financial risks. Both countries have also adopted a similar approach to transition risk. The most significant differences relate to tariff setting; uplift; adjustment for market forces, marginal versus full cost adjustment for variations in activity and the availability of tariff cost analysis. It remains to be seen which system manages financial risks most effectively. In the meantime hospitals must adapt, and to assist them in this, improved information and cost management systems are required.

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Both are members of CIPFA Health Panel