In Croatia, hospitals have been funded by monthly payments from the state health care budget, controlled by the state health insurance fund (Croatian Institute for Health Insurance, HZZO). Funds have to be accounted for through the issue of bills for medical services. These bills are a combination of fee-for-service (FFS) payments and charges levied under a Diagnosis Related Groups (DRG) system referred to as the PPTP (Placanje po terapijskom postupku).

Furthermore, hospitals have hard budgets. If a hospital exceeds its annual budget, it will not receive additional funding for any bills levied for further services provided. Conversely if hospitals do not provide enough services to account for all of their budgets in a given year, then, in accordance with their contracts with the HZZO, in the subsequent fiscal year their budgets should be reduced by an amount equal to these unspent funds.

Under the FFS reimbursement system, hospitals are reimbursed on the basis of inputs used. The payment system consists of three separate components: (1) hospital hotel services, paid via a flat rate per diem; (2) medical services provided; and (3) pharmaceuticals and other supplies that are paid for separately, depending on the cost of each item. Under the current FFS schedule, hospitals have an incentive to maintain a high level of bed occupancy and extend length of stay, since this high occupancy rate results in stable funding through per diem payments, while the majority of costs tend in fact to be concentrated in the first few days of hospital stays. Low occupancy rates also increase the risk that the HZZO will lower the global budget ceiling. The effects on service provision can be seen in Table 1, as average lengths of stay and bed occupancy rates in Croatian hospitals for acute care are significantly higher than in some neighbouring countries such as Slovenia, Hungary and Austria.

In 2002, the government started to introduce the PPTP, the parallel DRG-based element of the payment system for certain diagnoses that makes use of broad case groupings. By 2006, the number of services reimbursed via the PPTP system had grown to 118 selected diagnoses, with the remainder still being paid for by the point-based FFS schedule. Interventions for these PPTP case groupings were either costly or numerous and the prospective payment system was intended to provide hospitals with incentives to increase the technical efficiency of service provision. Both the use of broad-based case groupings in the PPTP system, as opposed to more detailed DRGs, as well as the prices set for particular PPTPs, have made them quite unpopular with providers. This system has on occasion been accused of underestimating the intensity of resource use for more complicated medical cases.

Nonetheless, encouraged by reports of efficiency gains arising from the implementation of the PPTP schedule, including reductions in length of stay, the government has now decided to gradually move towards a comprehensive prospective case-adjusted payment system based on DRGs. This will represent an important step in rationalising incentives in the health care system.

As in some other European countries, such as Ireland, Romania, Germany and Slovenia, Croatia has decided not to develop its own DRG system, but rather to import and modify the Australian Refined-DRG (AR-DRG) system (specifically, version 5.1), known locally as Dijagnostičko terapijske skupine (DTS). It has already been piloted in four Croatian hospitals since February 2006. As of April 2007, it has been introduced by the HZZO into all Croatian hospitals, initially

<table>
<thead>
<tr>
<th>Country</th>
<th>Average length of stay (days) per hospitalisation</th>
<th>Bed occupancy rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia (2004)</td>
<td>8.20</td>
<td>89.90%</td>
</tr>
<tr>
<td>Hungary</td>
<td>6.65</td>
<td>77.15%</td>
</tr>
<tr>
<td>Austria</td>
<td>6.35</td>
<td>76.20%</td>
</tr>
<tr>
<td>Slovenia</td>
<td>6.10</td>
<td>68.12%</td>
</tr>
</tbody>
</table>

Source: HZJZ 2005.
EUROPEAN SNAPSHOTS

running in tandem with existing billing systems. Until January 2008, all hospitals will continue to account for their budgets according to the old two-tiered FFS and PPTP schedule, but are now also obliged to keep track of cases according to the new DTS schedule. During this period, the HZZO plans to actively work with hospitals to ensure the appropriateness and quality of the coding used.

One of the greatest challenges to the introduction of this Australian system in Croatia still to be addressed is the difference in DRG costing between the two countries. The original ARG-DG system unsurprisingly made use of Australian data on resources use, clinical practice and the monitoring of hospital billing. A second challenge related to the possibility of a form of ‘gaming’ known as ‘code creep’ in DRG systems, i.e. coding patients as having more serious/complicated conditions that they actually have. This issue will have to be closely examined once the DRG system is fully implemented, but as yet the system is still in too early a stage of development and the issue has not received sufficient attention. In Australia, in contrast, six different mechanisms are now employed to reduce this risk of upcoding.4

REFERENCES