

Meeting abstract

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## System-wide impacts of provider-payment reforms: evidence from the health sectors of Central and Eastern Europe and Central Asia

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### Introduction

Only a small portion of today's existing research has made use of rigorous empirical methods to convincingly isolate the impact on the health sector of the new provider-payment arrangements from those which resulted from other changes occurring at the same time. Throughout the 1990s and early 2000s, several transitional countries in Central and Eastern Europe and Central Asia (ECA) aimed at reforming their provider-payment systems in order to achieve the general objectives of protecting health-spending levels and improving the overall performance of the health sector.

We use such reforms as a natural experiment to investigate, empirically, the system-wide impacts of introducing patient-based (casemix) and fee-for-service methods for hospital reimbursement (compared to line-item budgets) on a set of outcomes including hospital-activity rates, capacity utilization, national-health spending, and mortality amenable to healthcare.

### Methods

Using panel data gathered from 28 ECA countries from 1990 to 2004, and controlling for - among other factors - contemporaneous payment reforms in the primary-care sector, our three regression-based generalizations of the difference-in-differences approach seem to account adequately for the potential endogeneity of payment-method reforms.

### Results

At the hospital level, our results indicate that patient-based/casemix payment reduces the average length-of-stay by approximately 4%, and the bed-occupancy rate by 5% (with no perceptible effect on inpatient admissions). Fee-for-service methods, on the other hand, increase admissions by almost 8%, and the bed-occupancy rate by a similar magnitude. At the broader health-sector level, both payment arrangements raise per-capita health spending by a similar amount (approximately 20%), with equally large effects on both public and private spending.

Finally, we do not find evidence that using fee-for-service in preference to budgets has any effect on amenable mortality. However, significantly negative effects on the death rates for two causes - in addition to generally negative point estimates for the remaining measures - are found due to the introduction of patient-based methods.

### Conclusion

Overall, our results provide evidence that patient-based/casemix and fee-for-service hospital-payment methods have different effects, both at the hospital level and for the health sector as a whole. Both hospital-payment arrangements increase the amount of resources going into the health system (with potentially important distributional consequences), yet patient-based/casemix systems seem to do better in translating the additional resources into improved population health.