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Health Care Financing Reforms in Italy:

Projects of Jefferson's Center for Research in Medical Education and Health Care

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The Italian *Servizio Sanitario Nazionale (SSN)* was modeled after the health care system in the United Kingdom. The SSN provides universal coverage for all 57 million Italian citizens who have a constitutional right to health care – there is no issue of the uninsured as there is in the US. The system is primarily government funded, with a large majority of public hospitals (approximately 84 percent of hospital beds), although private hospitals also receive most of their funds through the SSN. Primary care physician reimbursement is capitated and specialty physicians are salaried.[1]

Beginning in 1995, a series of health care reforms were implemented in Italy. A major component of the reforms included changes in hospital financing, moving from a global budgeting approach to Diagnosis Related Group (DRG) based per case financing of hospitals with the goals of controlling the growth of hospital costs and making hospitals more accountable for their productivity. The 1995 reforms also included explicit incentives for the increased use of "day hospital" (outpatient) care to reduce a perceived overuse of "ordinary" hospital (acute inpatient) care.[2]

Jefferson's Center for Research in Medical Education and Health Care has collaborated on a series of projects related to these health care reforms in Italy. With funding from the Italian National Agency for Regional Health Services we have completed a project that assessed the impact of DRG implementation on quality of care and are now developing proposed models for modification of the DRG-based financing system for people with chronic disease. For the Umbria Region of Italy, we have developed alternative approaches to population based funding of health care. And, we are collaborating with the Gemelli Hospital of Catholic University, a large academic medical center in Rome, with a benchmarking project designed to explore how internal organizational features and patient characteristics affect departmental performance and outcomes for patients with common medical and surgical conditions. Each of these projects are summarized briefly below. The first project has been completed, the others are ongoing.

Quality of care: To assess changes in quality of care, we analyzed discharge abstract data for all patients hospitalized in the Friuli Venezia Giulia region for the 2 years prior to and 2 years after the implementation of the DRG-based hospital financing system. There was a significant decrease in days of acute hospital care per thousand residents. In addition, we observed a higher level of severity of illness among hospitalized patients for the nine medical and surgical conditions studied. There was little or no change in inpatient or 30 day mortality rates or in readmission rates. Based on this study, it does not appear that the implementation of the DRG-based financing system had a negative impact on health care quality in this region of Italy.[3]

DRG refinement: Italy has recognized the inherent problems associated with DRG-based hospital financing especially for individuals with chronic disease where repeated admissions may be avoidable with better coordinated care. We are currently developing models of potential changes in the DRG system using Disease

Staging[4] to account for differences in severity of illness with incentives for more appropriate use of acute care and outpatient care. Our analyses of alternative models for diabetes mellitus have assessed the potential financial impact on the region and individual hospitals.

Risk adjustment and population based financing of health care: In order to provide more appropriate funding, the US Medicare program has developed a risk adjustment system for refining the capitation payments to Medicare managed care plans beyond the previously used age-sex adjustments. Using demographic data, hospital discharge abstract data, and pharmaceutical data from one region in Italy we have tested the possibility of using the risk adjustment system used by the US Medicare program in Italy. In addition, we have evaluated refinements to this model using Disease Staging to classify severity of illness and its relationship to future health care need. We expect that Italian regions and local health authorities can use this data for planning an appropriate mix of services for the populations served.

An internal benchmarking project: With the fixed, per case reimbursement in the DRG-based financing system, Italian hospitals are concentrating on controlling costs while maintaining or improving quality of care. The Center is collaborating with a large (45,000 discharges per year) academic medical center in Rome in an internal benchmarking project. In studying four frequent surgical conditions and five medical conditions treated by multiple departments within the hospital we found significant interdepartmental variation in use of pre-admission testing programs and length of stay after controlling for differences in severity of illness. For example, for patients having a laparoscopic cholecystectomy for Stage 1 gall bladder disease and not participating in the pre-admission testing program the mean length of stay varied from 2.8 days in one department to 7.3 days in another. We are currently analyzing variation in the use of specific resources and the relationships among organizational characteristic, professional factors, and efficiency.[5]

Despite major differences between the US and Italian health care systems concerns similar to those raised in the US have been raised in Italy. Will cost-cutting incentives and reductions in length of stay lead to lower quality of care and worse patient outcomes such as increased severity of illness at discharge or higher mortality rates? Are the DRGs clinically specific enough to account for differences in severity of illness? What are the projected health care needs of a defined population, and how can they best be met? How can a large academic medical center survive in a cost-sensitive environment and maintain its patient care, research and educational missions?

These issues are extraordinarily complex in any health care system. The Italian health care system offers some advantages for these kinds of analyses since it has universal coverage, a single payer, and a relatively stable population. In the next year, we hope to continue our collaboration on the projects described above and expand the analyses to other regions in Italy.

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