Primary Health Services

Output-Based Contracting to Lift Performance in Romania

In 1994 the Romanian government introduced a pilot scheme of output-based contracts to develop the independent provision of primary health services, to increase the share of health spending going to preventive care, and to improve access to health services, especially in rural areas. To achieve these objectives, the scheme relied on output-based financial incentives and competition between doctors for patients. With modifications based on lessons from the pilot, the scheme has now been extended across the entire country.

Under Romania’s old health care system primary care doctors faced few incentives to provide preventive care or ensure patient satisfaction. Patients were simply assigned to practitioners on the basis of their residence or employment. Doctors’ incomes (low compared with the average income) were determined by seniority and length of service, with no link to quality or volume of care. Public health spending was low, averaging around 3 percent of GDP in 1990–97. Decisionmaking power over resources was centered in hospitals, with the result that primary care centers were starved of drugs and equipment. The end result of this system: patients often bypassed primary health services, seeking care directly from specialist physicians and hospitals. Treatment was free, in theory, at the point of service for all levels of care—though many paid under the table for better service, especially for specialist care.

In the early 1990s Romania started to reform its health sector—to shift the balance from hospital services toward primary care, and from curative care toward preventive; to address inequities in access to basic services resulting from inadequate staffing (especially in rural areas) and funding; and to give patients choice over their doctor. As part of the reform a pilot scheme introduced output-based contracts for primary care in 8 of the country’s 40 districts, covering about 4 million people, between 1994 and 1996. This new contracting system would use competition backed by financial incentives as a mechanism for shifting resources. The contract design had to strike a balance among specifying service requirements, allowing flexibility to respond to demand, setting workable performance targets, and protecting the system against abuse and budget blowouts. The contracts also had to anticipate moves to set up...
an autonomous national health insurance fund (financed by a 7 percent tax on salaries and a 7 percent levy on employers) and develop an accreditation system for health care providers to improve the quality of care.

**Designing the payment system**

In the eight pilot districts one-year service contracts were concluded between doctors and district health authorities, ending the doctors’ status as hospital employees. Doctors had to be accredited, but the criteria were very basic. To hold a contract, a family doctor had to have at least 500 registered patients (fewer would suggest poor service and would result in an inefficient allocation of funds to cover the fixed costs of running a medical practice). The optimum number of patients was deemed to be 1,500. Patients were allowed to choose their family doctor and to switch after three months.

The contracts covered curative and preventive primary services for the patients registered with each doctor. Services continued to be free to patients. The payments from the health authorities to doctors combined a capitation adjusted for patients’ ages (about 60 percent of the total) and reimbursement for about 30 fee-for-service items (about 40 percent).

A capitation is a fixed payment for providing a list of services for a set period to an enrolled patient. Providers receive the payment whether or not the patient used the services, so in principle they had an incentive to keep their patients healthy. The capitation was also meant to give physicians in areas with a surplus of providers an incentive to move to areas with a deficit, where it would be easier to build up patient lists. The capitation was increased for work in remote areas or difficult conditions (by 20–60 percent) and for professional qualifications (5 percent for specialists, 10 percent for senior specialists)—and reduced for not providing coverage at night (5 percent) or on weekends (10 percent). (The contract required 24-hour availability for emergencies.) The contract provided no clear guidelines on what was expected for the capitation, however.

The fee-for-service payments covered primary and secondary clinical preventive care, including periodic checkups, immunizations, pregnancy and child development monitoring, cancer and tuberculosis detection, and public health activities. But the fee-for-service requirements were defined only in general terms.

To calculate payments to doctors, their outputs were converted into points. To discourage doctors from registering too many patients, points for services were progressively reduced above two thresholds—by 50 percent above 1,500 registered patients and by 70 percent over 2,000. And to take into account the higher demand for services by infants and the elderly, these patients were assigned three to four times as many points as a young adult. The monetary value of a point was determined quarterly by dividing the budget for paying family doctors in the eight districts by the points reported. The contract required doctors to submit monthly reports on changes in their patient list and on the number of fee-for-service items provided. District health authorities had the right to audit the doctors’ records.

**Assessing the results**

The small number of indicators collected for routine monitoring has limited analysis of the pilot’s results. The data that are available show steady growth in the share of the population registered with family doctors—from 72 percent in the first quarter to 82 percent after one year and 86 percent after two years—with registration averaging 8 percentage points higher in urban than in rural areas. Few patients have changed doctors, though the number differed significantly among districts.

Two years after the pilot started the average patient lists in urban and rural areas were roughly the same (about 1,740), although there were more people per physician in rural areas (2,125) than in urban (1,929). The smallest lists (the highest density of physicians) occurred in the urban areas of a poorer district (about 1,200) and the rural areas of relatively well-off districts (1,300–1,400)—and the largest lists in the rural areas of a poorer district (nearly 2,500). This pattern suggests that in poorer districts family doctors prefer to practice in urban settings, even though that means a lower income, and that better-off districts attract more doctors, who have to build up rural practices even if they live in towns.
Family doctors increased their output, providing 21 percent more consultations and 40 percent more home visits, and at the end of 1996, 87 percent were providing emergency coverage at night or on weekends. The doctors identified higher patient expectations as a major factor in their increased workload. Surveys revealed that family doctors had become more client oriented. And interviews of both doctors and patients provided some evidence of a reduction in informal payments (already relatively low at this level of care).

In the first months there was a tendency toward “inflation” of fee-for-service items. Payments for these exceeded the 40 percent initially estimated as a maximum, so payment rules were changed and monitoring mechanisms strengthened. When fee-for-service points exceeded 65 percent of the capitation points, they were reimbursed at only 50 percent of their value. Auditing reports for reimbursement became a major task for the inspectors hired by district health authorities. Feedback from doctors suggests that the audits were uneven and erratic, reducing the credibility of the payment scheme.

For an average family doctor with a specialist qualification, caring for about 1,700 patients, the capitation accounted for about 65–70 percent of income and fee-for-service for the rest. Incomes increased by 15 percent on average (to about US$180–200 a month), with more than 80 percent of participating doctors experiencing an increase. The range of incomes also increased, with the top 5 percent earning more than four times as much as the bottom 5 percent.

Technical efficiency has increased in primary care, with output growing more than payments to service providers. But an effect on the overall efficiency of health services is difficult to prove. Although referrals to hospitals and polyclinics reportedly declined (by 8 percent in 1996), there are doubts about the quality of the data. There seemed to be no effect on hospital admissions, which increased by 3.6 percent in 1996, in line with the national trend (a 4 percent increase).

Weighing the prognosis

By introducing competition for patients, the scheme was expected to encourage doctors to expand their services rather than refer patients to hospitals, reducing health care costs. Family doctors do report fewer referrals, but as noted, there has been no significant change in hospital admissions. In urban areas with an adequate supply of doctors, however, competition does seem to be producing the desired results. Still, a lack of influence on the utilization of hospitals and specialist care would not be surprising, since no disincentives to unnecessary referrals were built into the payment system. Moreover, most patients still expect to be easily referred to specialists, and therefore would find family doctors responsive to that expectation more attractive.

The new delivery and payment arrangements had a positive effect on the quality of services. But the effect was limited by doctors’ lack of control over medical practice resources—which prevented them from influencing nurses’ performance and improving the physical conditions of practice—and by the lack of incentives and facilities for professional development. Although the regulations for the pilot provided for a practice budget that would have allowed doctors to make their own decisions about spending on new equipment or maintenance, in reality they had no possibilities for doing so because of budgetary constraints. Attendance by family doctors at training courses was poor, in part because of the lack of financial resources and a good system for ensuring that a backup doctor would be available.

The “optimum” list size of 1,500 patients proved too small to improve the distribution of family doctors, providing insufficient competition, and the disincentives over the threshold of 1,500 proved too steep. Further undermining competition, district health authorities turned out to be unwilling to make the “hard” decision of denying contracts to family doctors with small lists. Moreover, no mechanisms were designed to provide financial support for physicians moving to underserved areas, and the incentives from bonuses proved too weak.

The underspecification of requirements for the capitation led doctors to see it as an entitlement. Among fee-for-service items, the technical quality of some was questionable and difficult to monitor (such as cervical screening, routine examinations, and detection of breast and prostate cancer), and the frequency with
which they were provided varied widely. This is unsurprising, given the lack of clear guidelines for these services, the inadequate equipment, and the uneven training of physicians.

**Moving along**

After a new health insurance law came into effect in 1998, payment mechanisms similar to those piloted in the eight districts were introduced for general practitioners throughout the country for services contracted by newly established district health insurance funds. Lessons from the pilot led to some changes, however:

- To reduce the complexity of the capitation, the number of age groups and rates was reduced.
- Regulations on the capitation describe more clearly the services that need to be provided.
- The threshold above which the capitation is reduced was set at 2,000 patients (3,000 in localities with insufficient family doctors).
- A 100 percent bonus was added to the capitation for family doctors practicing in remote or low-income areas.
- For vaccinations, fee-for-service payments were simplified (awarding all vaccinations the same number of points), and family doctors can claim payments for vaccinating patients not on their lists (such as children attending schools in their practice area).
- Requirements for routine checkups are more clearly defined.
- To reward effective intervention (rather than mere reporting of clinical activities of uncertain quality), more points are awarded for screening and detection of cancer and tuberculosis, but only after confirmation by a specialist physician.
- An allowance based on the number of registered patients was introduced to cover all practice costs. This allowance is managed by the doctors, who have gained significant discretion over spending on staff and maintenance.
- Rather than setting a cap on individual doctors’ fee-for-service payments, the new system splits the primary care budget into allocations for capitation, fee-for-service, and practice budgets.

The College of Physicians, established in 1997, has started to develop practice guidelines and requires doctors to participate in continuous medical education as a condition for periodic recertification.

The new health insurance system led to a 25 percent (real) increase in health spending in 1999 compared with the mid-1990s. This increase allowed a significant rise in doctors’ incomes, the main element in primary care costs. But by the end of 2000 pressures from the increasing costs of drugs and hospital care were reversing the initial shift in resources toward primary care.

**Conclusion**

By combining per capita payments with limited fee-for-service and other incentives, the output-based contract developed in Romania seeks to encourage responsiveness to patients and key public health outcomes such as immunization and expanded access to health care—while still avoiding the problems of unconstrained fee-for-service remuneration seen in some OECD countries.

But purchasing authorities operating in Romania’s weak regulatory environment, with insufficient capacity and experience, have faced serious difficulties in monitoring both the number and the quality of services reported. Moreover, the changes have not yet significantly reduced the use of hospital services or redistributed providers to improve access to health services in rural areas. The system may need to establish more credibility before it can persuade patients to change their behavior and doctors to move to underserved areas.

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