58 schemes that included a coverage with evidence development component, 25 that included a conditional treatment continuation component, 35 that included a performance-based schemes component, and 37 that included a patient level financial utilization component. Each type of scheme addresses fundamental uncertainties that exist when products enter the market. There has been a continued upward trend in terms of total schemes adopted per year and the number of countries that supported performance-based schemes. Despite these continued positive trends, challenges persist including those related to: 1) the cost and burden of implementation; 2) the need for consistent processes for scheme development, data collection, reporting, and evaluation; and 3) negotiating follow-on agreements after scheme initiation. Furthermore, the challenges faced differ by country, health system and product.

CONCLUSIONS: There is a continued enthusiasm in many countries for using performance-based schemes for new medical products. Given the interest to date and the potential to meet the goals of interested stakeholders, these schemes may become a common element in health care coverage and reimbursement frameworks.

Sukhroty: Pfizer, Eli Lilly, Novartis, GSK, Boehringer Ingelheim, and Astellas.

The price-volume negotiation in Korea must be improved to motivate the pharmaceutical industry through adopting their opinions on advanced PV model which includes pay-back.

Additionally, generic promotion and pay-back system activation to contain the specific PV inclusion criteria and the choice between price reduction and pay-back. The price-volume negotiation in Korea must be improved to motivate the pharmaceutical industry through adopting their opinions on advanced PV model which includes pay-back.

Pharmaceutical pricing decisions are adopted in a context of uncertainty with regard to the efficacy and safety of the drug as well as to their budgetary implications. Traditionally, pharmaceutical firms have received a fixed price per unit sold regardless of health outcomes and sales volume. This pricing policy tends to increase health budgets and may restrict the access to pharmaceutical innovations for patients. Recently, health authorities have begun to use risk-sharing contracts based on health outcomes to cope with the aforementioned problem. In this paper, we carry out a theoretical modelling of the risk-sharing contracts, emphasizing the variables and parameters that are relevant in the relationship between health authorities and pharmaceutical firms.

METHODS: We have elaborated a theoretical model that describes the interaction between a pharmaceutical firm and a multi-stage game. The health authority chooses the pricing policy, either paying to the firm for treated patient or for cured patient, and in the second stage, the firm, given the pricing policy and the prescribing behaviour of the physicians, selects the price that maximizes its expected profit. We solve the game by backward induction, using the subgame perfect equilibrium as the solution concept.

RESULTS: Risk-sharing contracts are not always optimal in terms of social welfare. Their optimality depends on the parameters of the problem, being conditioned by the prescribing behaviour of the physicians, the efficacy of the drug and the monitoring costs. We characterize the parametric regions for which each pricing policy is socially optimal. CONCLUSIONS: Before using risk-sharing contracts, their convenience must be addressed for each particular case. As a necessary condition, the existence of objective quantitative health indicators is required. Otherwise, it is difficult to implement the pricing policy only based on cured patients.

OTHER OBJECTIVES: Research has shown that price-volume negotiations can be improved by moving away from the traditional ‘pay-for-service’ model and toward a more dynamic pricing system that allows for flexibility and collaboration between payers and suppliers.

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