

Modern payment models in health

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Oriana Ciani addresses the financial pressures that healthcare payers face due to rising costs of innovative therapies. The HI-PRIX project, funded by Horizon Europe, aims to create adaptable pricing and payment model for health systems, focusing on financial sustainability, supporting innovation, and ensuring timely access to high-cost medicines

The emergence of high-priced innovative therapies is placing substantial financial pressure on healthcare payers worldwide. Drug prices have risen rapidly over recent decades, and the current political discourse in the United States is increasing uncertainty across the life sciences sector in Europe and beyond.

European countries have historically achieved lower drug prices, more closely aligned with clinical value, than those in the US, largely thanks to publicly accountable institutions responsible for health technology assessment (HTA) and drug price determination. These bodies – either within or closely connected to government – define ‘value-based’ price benchmarks, generally grounded in the clinical and/or cost-effectiveness of new therapies relative to existing treatments and the prevailing standard of care. These benchmarks are then incorporated into regulatory and negotiation processes for drug pricing.

Most recently approved advanced therapy medicinal products (ATMPs) have per-patient prices exceeding five figures in euros. Their benefits typically accrue over a patient’s lifetime after a single administration, which contrasts with the traditional model in which treatment costs and benefits unfold gradually and are assessed yearly for coverage purposes.

To address these challenges, several financing and reimbursement mechanisms have been developed, including: i) individual annuities, which convert a high upfront cost into multi-year installments; ii) performance- based annuities, contingent on demonstrated treatment performance; iii) risk-pooling mechanisms in insurance-based systems, where constant payments are maintained at the plan or employer level through reinsurance or state-level bonding.

To date, the most common approach in the EU has been outcomes-based reimbursement schemes, under which payers only pay for patients who respond to treatment, and refunds are issued otherwise. However, these schemes can be difficult to design, operationalize, and monitor.

More broadly, innovative pricing models are needed to balance payers’ demands for value for money with manufacturers’ need for incentives to stimulate innovation. For example, during the COVID-19 pandemic, advanced market commitments were used to fund vaccine R&D, with the understanding that recipients would later supply vaccines at prices covering only production

costs. Similarly, to stimulate urgently needed antibiotic innovation, subscription payment models (the so-called ‘Netflix schemes’) were introduced to decouple payment from the volume sold and instead reward overall societal value.

The HI-PRIX project

A promising direction for future pricing models involves shifting from ‘paying for pills’ to ‘paying for services’, enabling manufacturers to act as partners in delivering (often digitalized) services. Such models may include non-linear payment systems such as price-volume agreements, bundled payments, population-based models, or integrated-care approaches.

The Health Innovation Next Generation Payment & Pricing Models (HI-PRIX) project, funded by the Horizon Europe research programme from 2023 to 2025, aims to map and formulate new pricing and payment schemes applicable across technology classes, therapeutic areas, care settings, and healthcare systems/geographies. It has also identified guiding principles to support successful adaptation and flexible implementation. The project has produced a publicly available ‘Pay for Innovation Observatory’ that describes 60 pricing and payment schemes and documents more than 150 real-world applications.

The challenges currently faced by healthcare payers around the world demonstrate that no single payment model can provide an effective solution in all circumstances. Instead, a diverse set of innovative pricing and payment mechanisms must be developed and tailored to ensure the financial sustainability of public and private healthcare systems, maintain adequate incentives for innovation, and guarantee timely access to high-cost innovative medicines. In addition, the HI-PRIX project has examined how a pipeline of contracting modalities for health innovation affects competitiveness, innovation, equity, and affordability – addressing the concerns of payers, manufacturers, healthcare professionals, and patients.

As tensions persist between manufacturers – rightly seeking to recoup substantial R&D investment – healthcare providers – working to ensure broad patient access to novel technologies – and payers – responsible for maintaining the financial sustainability of healthcare systems – pricing and payment schemes offer a comprehensive toolkit to support decisions on pricing, reimbursement, and access. Importantly, it is not the scheme itself that is inherently innovative, but rather its application within a given context and its suitability to address specific challenges.

Meaningful solutions to these complex issues require careful consideration of all perspectives and sustained dialogue among payers, manufacturers, healthcare professionals, and citizens about the necessary trade-offs between affordability, innovation, and patient access.

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