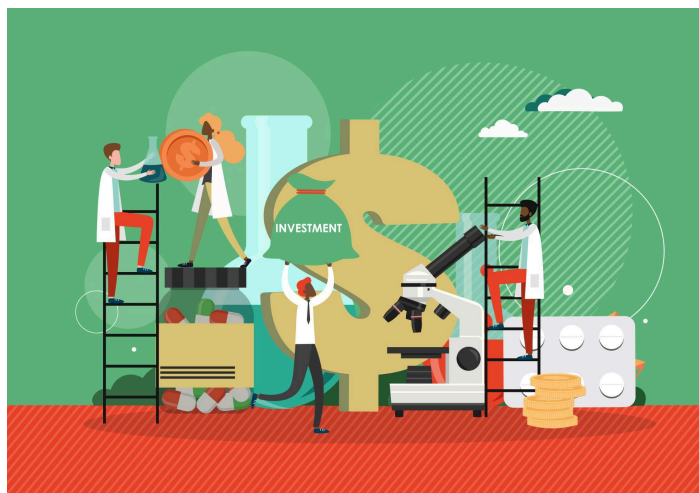


How should we reward pharmaceutical innovation?

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How should prices for new drugs in the NHS be set? Our research tackles the much debated but unresolved issue of how to set an affordable price whilst also providing incentives for manufacturers to invest in the development of new products.

Our research offers, for the first time, a practical and evidence-based approach to pharmaceutical pricing policies and payment mechanisms to balance affordability with the value of future innovations. Policies must consider the long-term value of pharmaceutical products beyond the point when their patents have run out. They also must take account of the effect that payment levels will have on the quantity and quality of future innovations. The key question is what share of the total long-term value of a new pharmaceutical should be offered to manufacturers to incentivise future innovation and the value that it generates?

Based on the best available evidence, our research indicates that the optimal share of the long-term value of new pharmaceutical products to offer to manufacturers is roughly 20%. Our reanalysis of a sample of technology appraisals undertaken by the National Institute for Health and Care Excellence (NICE) suggests that, in most cases, the share of value offered to manufacturers and the price premiums paid by the NHS were higher than optimal. In many cases, manufacturers were paid more than 100% of the products value, leaving the NHS with less than zero share of the long-term value. Implementing an NHS payment and pricing policy based on these findings would bring considerable benefits to population health and broader economic and social welfare.

Payment levels consistent with an optimal share of value could be delivered in a range of different ways. Existing policies could be used (e.g. setting lower cost-effectiveness thresholds or higher rebates), or there are alternative routes such as subscription models where the NHS effectively pays a 'rent' to access the product for a set number of years, or via commitments to price reductions when patents run out. A combination of these policies could also be used.

For a variety of reasons, the suggested optimal share of value to offer to manufacturers and the payment required to achieve it are likely to be overestimated in our research. Our future work will consider some of these factors, including the effect of payment on manufacturing costs and how to account for the contribution of publicly funded research. It will also consider how the benefits of innovation are distributed globally.

Read the full paper in [Health Economics](#).

Read previous work on which the research was based in [Health Economics](#).

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