

4th Health Economics Conference

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Toulouse



Toulouse
School of
Economics



CEPR

Insights from the 4th Health Economics Conference Toulouse, June 16 & 17, 2026

VENUE

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Thinking health systems in an era of demographic, technological, and geopolitical change

On June 16-17, Toulouse School of Economics hosted the 4th TSE-CEPR Health Economics Conference, bringing together leading researchers, policymakers, regulators, and industry representatives to discuss some of the most pressing challenges facing healthcare systems.

Against a backdrop of population ageing, rapid medical innovation, growing healthcare workforce needs, and increasing pressure on public finances, the conference explored how economic research can inform the design of more resilient, efficient, and equitable health policies.

The program featured keynote lectures by Neale Mahoney (Stanford University) and Jonathan Gruber (MIT), examining respectively the **growing economic role of healthcare employment in the United States** and the **institutional foundations of universal health coverage**.

The conference also included a **roundtable discussion on the US Most Favored Nation (MFN) policy** and its potential implications for pharmaceutical pricing, innovation, and competitiveness on both sides of the Atlantic. Speakers examined how changes in US drug pricing could affect investment incentives, patient access, industrial competitiveness, and Europe's position in the global life sciences ecosystem.

The following summary highlights the main insights and policy implications emerging from these discussions.

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Keynote lecture 1 - Healthcare's New Workforce: How healthcare became America's main engine of job growth

The Rise of Healthcare Jobs

Neale Mahoney (Stanford University), with Joshua Gottlieb (University of Chicago), Kevin Rinz (Federal Reserve Bank of Cleveland), and Victoria Udalova (U.S. Census Bureau).

Over the past three decades, healthcare has quietly become the largest employer in the United States (US) economy, surpassing both manufacturing and retail trade. Yet despite its growing economic importance, relatively little research has examined how healthcare jobs are evolving, who fills them, and what this transformation means for local labour markets. Drawing on a unique combination of Census data, professional registries and insurance claims, Neale Mahoney presented new evidence on the rise of healthcare employment and its implications for the future workforce.



An expanding sector with divergent occupational trajectories

Using detailed Census and American Community Survey data covering the period 1980 to 2022, complemented by professional registry and insurance claims data, the authors show that healthcare employment has expanded at nearly twice the pace of the overall US economy (2.1% annually versus 1.1%). The sector now employs around 18 million workers and has been one of the main drivers of wage growth for middle-class and upper-middle-class workers.

Occupational differences remain significant. Physicians continue to occupy the highest income brackets, while healthcare aides are concentrated at the lower end of the wage distribution. Nurses hold an intermediate position. The workforce has also become increasingly educated, particularly among nurses and advanced practice providers. Although healthcare remains a predominantly female sector, the gender composition of occupations has evolved substantially, with women accounting for a growing share of physicians.

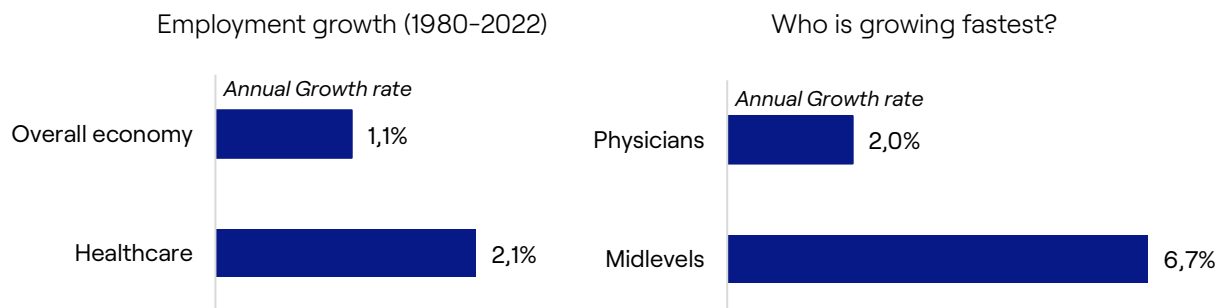
“Healthcare has been the sector where the middle-class and upper- middle-class wage growth has been strongest

The rise of midlevel practitioners

One of the study's most notable findings concerns the rapid expansion of midlevel practitioners, including nurse practitioners, physician assistants, certified registered nurse anesthetists and certified nurse midwives. These professions require substantially less training than physicians and can therefore be deployed more rapidly to meet growing healthcare needs.

Since 2010, employment growth among these professionals has considerably outpaced that of physicians. Midlevel practitioners now account for more than half of primary care consultations in the United States, and their role continues to expand, particularly in underserved and rural areas.

The researchers also assess whether this trend is primarily driven by scope-of-practice reforms that grant greater autonomy to non-physician providers. Their analysis suggests that regulatory changes explain only a small fraction of the observed growth. Instead, the expansion of midlevel practitioners appears to reflect deeper structural forces, including growing demand for healthcare services and constraints on physician supply.



Healthcare and the limits of regional reallocation

The paper also revisits the popular narrative that healthcare can serve as a replacement industry for regions affected by manufacturing decline, the Rust Belt in particular, with cities such as Pittsburgh, Cleveland, and Rochester frequently cited as models. While healthcare employment has grown somewhat faster in areas that have experienced significant industrial losses, the effects remain relatively modest. The authors estimate that only about eleven healthcare jobs are created for every hundred manufacturing jobs lost.

The findings suggest that healthcare expansion alone cannot fully offset the economic consequences of deindustrialization. Moreover, the transition into healthcare occupations has been much more common among women than among former male manufacturing workers, raising broader questions about labour market adjustment and regional inequality.

11% The Share of
Manufacturing Job
Losses Offset by
Healthcare
Employment Growth

KEY TAKEAWAYS

- Healthcare is now the largest and fastest-growing employment sector in the United States. It has been the primary driver of middle-class wage growth over the past four decades.
- The rapid expansion of midlevel practitioners (growing at 6.7% per year and now providing the majority of primary care encounters) reflects structural pressures on healthcare delivery rather than regulatory changes alone.
- Healthcare contributes to economic adjustment in former manufacturing regions but offsets only a limited share of manufacturing job losses (11% of manufacturing job losses, consistent with its overall national labour force share)

Keynote lecture 2 – Universal Health Coverage: Beyond single-payer myths: what really delivers coverage?

What Is Universal Health Coverage?

Jonathan Gruber (MIT), with Mark Shepard (Harvard University)



Health care risks are large and unpredictable, with the top spenders incurring medical costs that represent multiple times the median national income. In his keynote, Jonathan Gruber (MIT) outlined ongoing research with Mark Shepard (Harvard University) that defines Universal Health Coverage (UHC) as a state where “no one faces unaffordable costs to get essential health care.”

To evaluate how countries might achieve this objective practically, they establish a new global taxonomy of healthcare systems to identify what elements are truly necessary to achieve complete, functional universal coverage.

Why universal coverage requires more than access

Traditional economic arguments for government intervention in healthcare focus on market failures, such as adverse selection and limited competition. These factors help explain why governments subsidize insurance and seek to expand access to care.

However, Gruber argues that access alone is not sufficient to achieve universal coverage. Even when insurance is available and affordable, many individuals fail to enroll because of administrative complexity, inertia, or short-term decision-making. As a result, systems that rely heavily on individual initiative can leave significant portions of the population without adequate protection.

According to the authors, universal coverage therefore requires institutions that not only make insurance available but also make enrollment simple, automatic, and continuous.

Coverage system taxonomy and key facts

To compare approaches to universal health coverage (UHC) across countries, the researchers propose a new taxonomy based on how people are enrolled in health insurance, rather than on how healthcare services are delivered.

The first model, **Automatic Public Coverage**, automatically enrolls residents in a public insurance scheme. Countries such as the United Kingdom and Canada illustrate this approach.

100%

Both systems achieve near 100% citizen coverage and spend a remarkably consistent 9% to 12% of GDP

The second model, **Mandatory Multi-Payer Systems**, achieves universal participation through compulsory enrollment in regulated insurance plans operated by multiple insurers. France, Switzerland, and the Netherlands are representative examples.

Although these two models differ institutionally, they both succeed in providing near-universal coverage and allocating a comparable share of national income to healthcare.

The third category, **Fragmented or Incomplete Systems**, includes countries where multiple insurance arrangements coexist without fully coordinated enrollment mechanisms, such as in the United States and China. In these systems, some individuals remain uninsured or insufficiently covered despite the existence of available insurance options. The United States is a prominent example: reforms such as the Affordable Care Act (ACA) have expanded access to insurance, but enrollment gaps persist.

The authors therefore argue that the key distinction between healthcare systems is not whether coverage is public or private, but whether enrollment mechanisms effectively prevent people from falling through the cracks.

What is necessary for universal coverage

In reviewing how these systems perform operationally, the authors emphasize that structural differences do not dictate a system's completeness. For instance, out-of-pocket (OOP) spending does not correlate cleanly with system types, often acting as a market-driven "escape valve" for patients looking to bypass public queues or restricted quality. Italy is a prime example: the public system features minimal cost-sharing on paper, yet exhibits a high OOP share (22.3%) because patients routinely choose to pay private fees to bypass public wait times. Conversely, the multi-payer frameworks found in the Netherlands or Switzerland integrate features like comprehensive pharmaceutical coverage from the start and yield higher overall user satisfaction. Ultimately, the study concludes that a single-payer architecture, a specific financing method (such as general taxation vs. payroll taxes) or identical top-tier quality for everyone are *not necessary* for successful UHC. Instead, what is *absolutely necessary* is a strong social consensus for seamless administration, an active supplemental insurance escape valve, and massive public investments.

Looming issues: Population aging and financing radical innovation

Looking ahead, all international health systems face severe financial pressures from demographic shifts and radical technological breakthroughs. Over the next 25 years, a global surge in populations aged 85 and older will test the fiscal limits of publicly funded Long-Term Care (LTC) networks. Simultaneously, ultra-expensive advancements like multi-million dollar rare disease gene therapies or mass-market GLP-1 obesity medications create a tension between clinical value and system affordability. To withstand these pressures, Gruber argued that nations must shift toward novel, delinked purchasing structures, global Advance Market Commitments (AMCs), or subscription-based "Netflix models"—such as the one piloted in Louisiana for Hepatitis C—to secure high-value cures at marginal cost.

KEY TAKEAWAYS

- **Internalities necessitate mandates:** Traditional market failures like adverse selection only justify universal access; individual behavioral biases and over-sensitivity to small premiums are what make mandatory coverage necessary.
- **Taxonomy based on enrollment:** Universal coverage success is determined by enrollment infrastructure rather than medical delivery, with automatic public registries and multi-payer mandates both proving highly effective.
- **OOP (Out-Of-Pocket) spending as an escape valve:** High out-of-pocket costs in universal nations frequently indicate that patients are spending to bypass structural friction, such as long queues for elective procedures.
- **New financing for innovation:** The rise of high-value, high-cost specialized therapies requires systems to pivot toward global subscription purchasing and delinked pull incentives to preserve fiscal sustainability.



From left: P. Dubois, N. Mahoney, J. Gruber, A. Acquatella, J. Tirole

Policy roundtable – Challenges of the US Most Favored Nation Policy for Pharmaceutical Pricing and Innovation

The US Most Favored Nation (MFN) policy, which has been in discussion for 15 years in the U.S. The proposed policy seeks to narrow this gap by linking certain US drug prices to those observed in a group of comparable countries. While the mechanism itself is not new, applying it to the world's largest pharmaceutical market could have far-reaching consequences for pricing, innovation, market access, and industrial competitiveness worldwide.

This roundtable, chaired by Pierre Dubois (TSE Health Center Director and CEPR) brought together economists, regulators, policymakers, and industry representatives to examine the potential effects of an MFN-style policy on both sides of the Atlantic. Discussions explored the implications for pharmaceutical innovation, launch strategies, access to medicines, European competitiveness, and the need for greater coordination in an increasingly globalized pharmaceutical ecosystem.



P. Pita Barros (Nova School of Business, Lisbon), V. Beaumeunier (President CEPS), C. Raynaud (Head of international policy & communication, Pfizer France), N. Schlumberger (Head of Market Access at Sanofi France), M. Suppliet (DG SANTE, European Commission), J. Tirole (TSE and CEPR)

Most Favored Nation policy – An old idea on a new scale



Pedro Pita Barros opened by placing MFN in context: reference pricing on a basket of comparator countries is not new, but what is new is the sheer size of the US market applying it. The proposed reference basket – the G6 plus Switzerland and Denmark – would be based on net rather than list prices, forcing companies to report actual transaction prices rather than far-from-effective list prices.

International reference pricing is not a new concept. As Pedro Pita Barros noted, many countries already rely on price benchmarks from comparator markets, but the novelty of the Most Favoured Nation (MFN) proposal lies in its application by the United States, given the sheer size and influence of its pharmaceutical market.

Under the proposal, US drug prices would be benchmarked against those observed in a group of comparator countries, including major European markets.

Unlike traditional approaches based on list prices, the proposal would rely on net transaction prices, requiring manufacturers to disclose the prices actually paid after rebates and discounts. This could significantly increase pricing transparency and alter the way pharmaceutical companies negotiate across markets.

Because US prices remain substantially higher than those in most other high-income countries, linking them to European benchmarks could create upward pressure on prices outside the United States as companies seek to limit international price differentials. Several participants also highlighted potential strategic responses from manufacturers, including launch delays, selective market entry, or a greater reliance on confidential pricing agreements in countries used as reference points.

The longer-term implications concern pharmaceutical innovation. Lower expected revenues in the United States could reduce incentives for research and development overall. However, Pedro Pita Barros suggested that firms may also adapt by redirecting investment towards highly effective therapies capable of commanding premium prices even in a more regulated pricing environment. Beyond affecting prices, the MFN proposal could therefore reshape both global launch strategies and the future direction of pharmaceutical innovation.

France's answer: predictability before reaction



Virginie Beaumeunier (President of CEPS¹) shared her work on “mission flash”, formulating proposals for modernizing French drug policy on price setting and expenditure control. French policy should not be dictated by the US move but needs to account for it by balancing attractiveness for pharmaceutical firms against budget control. The central proposal calls for a more predictable life cycle pricing model: a more predictable and multi annual pricing trajectory with predefined milestones for regulation discussions.

¹ The French Economic Committee for Health Products (CEPS) is an interministerial body responsible for negotiating and setting the prices of reimbursed medicines and certain medical devices in France. It operates under the joint authority of the ministries responsible for Health, Social Security, and the Economy, with the aim of balancing access to innovation, healthcare spending control, and industrial competitiveness.

Where justified, CEPS would accept premium prices for the most innovated products, offset by tighter regulation and multi-year savings targets in more competitive segments – for instance as major generics arrive, which are easier to plan around.

She also wants pharmacists' remuneration to depend less on the volume and price of the products they dispense and more on their professional role.

Concluding, Virginie wonders whether the current model of pharmaceutical industry is still sustainable for a long time, given that a permanent increase in drug expenditure is not sustainable for social security system in the context of aging population and shifting chronic disease burden. A final question is whether there is a link between high price expectations of industrial pharmaceutical companies and outsourcing of R&D. Further, industrial policy coordinated at the European level may be more effective than purely national measures.

“ More coordinated European industrial strategy may ultimately prove more effective than purely national responses

A mirror held up to France



For Catherine Raynaud (Head of International Policy & Communication, Pfizer France), the MFN clause holds up a mirror to France's own performance on access to innovation, and not a flattering one. A few years ago, the French model was attractive to innovators, both due to its universal patient access, high volumes that compensated for relatively low prices, and a strong healthcare system backed by public investment.

That position has eroded. Of 173 medicines approved in Europe between 2020 and 2023, only 103 are available in France – around 60% against roughly 90% in Germany. French patients wait an average of 633 days to access a new medicine, versus 158 days in Germany, and over the past decade France has slipped from the leading position of hosting clinical trials to fourth place in Europe. Slower access and lower relative returns push companies to launch elsewhere first, or not at all in France – meaning fewer clinical trials, less innovation, and weaker support for the healthcare system, a self-reinforcing cycle. The MFN clause amplifies this dynamic and the debate is not new. By contrast, the US pays several times more for medicines but funds risk-taking, even though a large share of the underlying innovations originate in Europe; pressure to lower US prices has bipartisan support and is here to stay. France still has the underlying scientific assets but faces a growing gap between its price ambitions and the signal it sends to innovators in a competitive global innovation landscape.

“ The real question is not how much we spend, but whether we want to stay in the race in the global innovation landscape

The case for a European response



Nicolas Schlumberger (Head of Market Access, Sanofi France) emphasized that there is an indirect but very important link between what we see in clinical trials and the effect on health and education on the different territories where those clinical trials are held. Also, he argued that discussions on pharmaceutical pricing and innovation should be considered from a broader European perspective. Across Europe, countries are increasingly seeking to incorporate industrial and innovation considerations into pharmaceutical policy, although approaches remain highly fragmented.

Germany already factors in clinical trial hosting, Spain uses a ratings-based approach and France's own mission-flash report recommends taking clinical trials and industrial investment into account in pricing. Germany's new government is pursuing an industrial strategy similar to France's. According to Schlumberger, a purely national strategy fails to reflect the reality of today's pharmaceutical industry, whose supply chains, research activities, and manufacturing processes are deeply integrated across European borders. Policies that focus solely on domestic production therefore risk overlooking the interconnected nature of the sector.

"The elephant in the room", is the need to address this issue at the EU level. Looking at the federal countries, we can perfectly admit that there are two levels of reimbursement: Brazil's federal reimbursement system – in which the individual states remain free to extend their own reimbursement protocols – could be one possible model for combining EU-wide coordination with national flexibility.

Brussels' view: more than reference pricing

Moritz Suppliet (DG Health and Food Safety, European Commission) stressed that reference pricing is only one strand of the US MFN strategy: it is being implemented alongside tariffs on pharmaceuticals and in parallel to several bilateral agreements between the US administration and leading pharmaceutical companies covering potentially a large share of the US pharma revenues. The terms of these deals remain confidential but seem to exempt those firms from some of the policies, resulting in unknown variables for policy.



As different measures are being mixed across policy areas and many have only been announced, uncertainty is affecting pharmaceutical markets, ahead of any policy taking effect. He noted that US reference pricing alone is mostly being implemented through four distinct channels – "GENEROUS", "GLOBE", "GUARD", and bilateral deals – which together touch Medicare Part D and B, Medicaid, and a small share of direct-to-consumer sales. Not all of the US pharmaceutical market seems to be concerned because some of the policies are mandatory and others voluntary and yet for others only a subset of the population is actually exposed.

While pricing and reimbursement of medicines remains competence of the Member States, the Commission supports exchanges about the topic. Moritz Suppliet pointed to strong commitments at EU and Member States level to further strengthen competitiveness and support innovation in the EU pharmaceutical sector.

Prices, delay and Europe's mid-tech trap

Jean Tirole (TSE and CEPR) argued that price differences across countries are natural, given differences in income, institutions, and market size – MFN, in that sense, is a subtle form of extraterritoriality, cascading US pricing pressure down onto poorer countries. Access to a given drug is rarely a strict yes/no decision but a question of delay, drawing a parallel to durable-good monopoly pricing, and suggesting that recurring and one-shot treatments (increasingly common with targeted therapies) likely respond very differently to that dynamic.



He cautioned that industrial policy covers many different objectives: securing or procuring molecules that already exist versus supporting genuinely new innovation, closer to a public good. There is surprisingly few research on whether reshoring, long-term contracts, stockpiling, and supply diversification actually deliver. He referenced work on Europe's "mid-tech trap": roughly a third of Europe's private R&D budget goes to the automobile sector alone, and about half to mid-tech overall, versus around 85% of private R&D in the US going to high-tech and biotech. Within Horizon Europe, conceived as Europe's answer to DARPA, only about 5% of funding goes to high tech, a gap he attributed in part to European governance problems, including the unanimity rule.

He pressed the panel on what "made in Europe" really means given global supply chains, and what higher prices actually buy, given how multidimensional price itself is.

KEY TAKEAWAYS

- **MFN's real innovation is scale rather than mechanism:** reference pricing is not new but would it be applied at the size of the US market it could create unprecedented upward pressure on non-US prices.
- **The likely near-term response is opacity and delay rather than simple convergence:** more confidential, performance-based pricing; launch delays; and clinical trials narrowing toward populations that justify higher prices.
- **France faces a growing tension between cost containment and attractiveness for innovation.** Despite strong scientific capabilities and a high-performing healthcare system, slower access to innovative medicines and declining attractiveness for clinical research may weaken its position in the global innovation landscape
- **EU Implications:** Industry and policymakers broadly agree that EU-level exchanges would help to understand the effect of the US policies and its implications for EU markets.
- **Europe's Competitiveness Gap:** Europe's underinvestment in high-tech R&D relative to mid-tech sectors, reinforced by unanimity-bound governance, is as much a constraint on competitiveness as pricing policy itself.

Final thoughts

This year's conference highlighted a shared challenge across health policy debates: how to balance access, sustainability, and innovation in the context of demographic and technological change.

Several common themes emerged. Healthcare is becoming an increasingly important driver of economic activity and employment. Achieving universal coverage requires not only accessible insurance but also effective enrollment mechanisms. At the same time, rapid medical innovation is creating new opportunities while raising concerns about affordability and long-term financing

The discussions also emphasized the growing need for policy coordination beyond national borders, particularly in areas such as pharmaceutical innovation, access to medicines, and supply-chain resilience. While no single solution emerged, participants pointed to the importance of stronger institutions, predictable regulatory frameworks, and better alignment between public objectives and private incentives to build resilient and innovation-friendly health systems.

Program, slides & replays

- Program and slides of contributions to the Conference are available on the webpage of the [4th Health Economics Conference](#)
- [Replays available on TSE Youtube channel \(playlist TSE Health Center\)](#)

Thank you

TSE thanks all the speakers of the conference for their contributions and also thanks the partners of the [TSE Health Center](#) (bioMérieux, Clinique Pasteur, Gers, IUCT-Oncopole, Leem) for their support, as well as the European Research Council (ERC), the Centre for Economic Policy Research (CEPR), the "Investment for the Future Program" (Bpifrance for ARPEGE). TSE also extends its sincere thanks to all those who contributed to these conference summaries.



Save the date: [5th Health Economics Conference](#), June 16–17, 2027 – Toulouse

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