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Health Care Cost Containment Strategies Used In Four Other High-Income Countries Hold Lessons For The United States

ABSTRACT Around the world, rising health care costs are claiming a larger share of national budgets. This article reviews strategies developed to contain costs in health systems in Canada, England, France, and Germany in 2000–10. We used a comprehensive analysis of health systems and reforms in each country, compiled by the European Observatory on Health Systems and Policies. These countries rely on a number of budget and price-setting mechanisms to contain health care costs. Our review revealed trends in all four countries toward more use of technology assessments and payment based on diagnosis-related groups and the value of products or services. These policies may result in a more efficient use of health care resources, but we argue that they need to be combined with volume and price controls—measures unlikely to be adopted in the United States—if they are also to meet cost containment goals.

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The past decade saw a considerable increase in health care spending in many high-income nations. Despite efforts to contain health care costs, the most recent data from the Organization for Economic Cooperation and Development show that average per capita spending on health among member countries increased by more than 70 percent between 2000 and 2010.¹

In the countries we studied for this article, per capita spending increased during 2000–10 by 2.6 percentage points of gross domestic product (GDP) in Canada, 1.5 percentage points in France, 1.2 percentage points in Germany, 2.6 percentage points in the United Kingdom, and 3.9 percentage points in the United States. Although both per capita spending and the share of GDP spent on health care was highest in the United States in 2000 and 2010, the rate of growth in per capita spending between the two years was higher in the United Kingdom and Canada than in the United States (Exhibit 1).

This article reviews the use of strategies devel-

oped to contain costs in Canada, England, France, and Germany over the past ten to fifteen years. It is based on a comprehensive analysis of each of the four countries conducted by the authors for the European Observatory on Health Systems and Policies.^{2–5} It also builds on work by Elias Mossialos and Julian Le Grand⁶ that documented government strategies to contain health costs across the European Union from the 1970s to the end of the 1990s, as discussed below.

The article has three components. First, we update the earlier work by Mossialos and Le Grand for selected countries, covering the period from the late 1990s to 2012. Second, we identify what, if anything, changed in that period in national approaches to managing health care cost growth, and we examine how effective these strategies have been. Third, we provide policy implications and lessons for other jurisdictions.

The four countries chosen for our analysis represent a range of health system organizational structures, from Canada's highly decentralized system of national and provincial payers to Germany's system of competing health insur-

EXHIBIT 1

Total Health Care Cost Growth In Five Countries, 2000–10

	Canada	France	Germany	United Kingdom	United States
Growth of health spending (%)	76	56	62	87	72
PER CAPITA HEALTH SPENDING (US\$)					
2000	2,519	2,545	2,678	1,834	4,791
2010	4,445	3,974	4,338	3,433	8,233
TOTAL HEALTH SPENDING (% OF GDP)					
2000	9	10	10	7	14
2010	11	12	12	10	18
PUBLIC SHARE OF TOTAL HEALTH SPENDING (%)					
2000	70	79	79	79	43
2010	71	77	77	83	48
OUT-OF-POCKET SHARE OF TOTAL HEALTH SPENDING (%)					
2000	16	7	11	11	15
2010	14	7	13	9	12
DRUG SPENDING PER CAPITA (US\$)					
2000	401	420	362	260	540
2010	741	635	640	— ^a	983

SOURCE Organization for Economic Cooperation and Development. OECD Health Data 2012 (Note 1 in text). **NOTES** The Organization for Economic Cooperation and Development reports data for the United Kingdom, not England. Percentages have been rounded. US dollars are purchasing power parity. GDP is gross domestic product. ^aThe most recent data for UK drug spending are from 2008.

ance or “sickness” funds. The health system in France is dominated by noncompeting health insurance funds. In Canada the individual provinces are responsible for most decisions affecting the health sector. We focused on five provinces: Ontario and the western provinces of British Columbia, Manitoba, Saskatchewan, and Alberta. Responsibility for health care in the United Kingdom was devolved—that is, shifted from the central government to governing bodies in Northern Ireland, Scotland, and Wales—at the end of the 1990s. Our analysis covered developments in England only.

Our review revealed that these four countries continue to use budget setting and price controls to contain costs. However, we also found a shift away from strategies that simply shift costs to households—through across-the-board budget cuts, rationing of services, and higher user charges—toward policies aimed at changing the cost-benefit ratio by tailoring payment to value. These policies use technology assessment, funding based on “activity”—a diagnosis-related group is an example of an activity in this sense—and prices based on the value of products or services, all of which may result in a more efficient use of health care resources.

Analytical Framework

This article adopts an analytical framework developed by Mossialos and Le Grand in 1999⁶ to

examine recent efforts at health care cost containment in Canada, England, France, and Germany. The framework categorizes cost containment strategies according to whether they shift health care expenditure to an alternative budget, usually household budgets, by reducing coverage; set budgets—that is, impose upper limits on health spending in specific areas—from the national level to the patient level; or apply direct or indirect controls to the supply of health care (Exhibit 2).

Applying this framework to Western European countries in 1999, Mossialos and Le Grand showed how countries employed different approaches to contain costs at different times.⁶ During the 1970s and early 1980s cost containment strategies focused on direct and indirect controls of health care supply. From the mid-1980s to the mid-1990s the focus switched to setting budgets.

In the late 1990s the emphasis changed again, as the shifting of expenditures from national to local or even to household budgets became more popular. This change was accompanied by the greater use of tools such as health technology assessment to identify priorities for public funding and enable evidence-based purchasing.

The framework raises some methodological questions. First, what cost is being contained—overall health care spending, public-sector spending, out-of-pocket spending, or another measure of spending? Because the focus of our analysis is on cost containment by government, public-sector spending on health was the cost we examined.

Second, what counts as a cost containment strategy? Exhibit 2 lists health care cost containment strategies (a more detailed list of strategies by country is presented in the online Appendix).⁷ We recognize that some of them may not in fact contain public or overall costs, even if they are introduced by policy makers with that goal in mind.

Below we summarize the strategies that our four subject countries now employ to contain health care costs. We also comment on the trends that emerged over the past ten to fifteen years and on evidence of each strategy’s effectiveness as a cost containment measure.

What Countries Do To Contain Costs

BUDGET SHIFTING Budget shifting aims to contain costs in two ways: shifting costs onto households or private insurers by reducing publicly financed health coverage, and shifting costs onto other parts of the government by moving financial responsibility from one administrative level to another—such as from the national to the state

EXHIBIT 2**Health Care Cost Containment Strategies**

Approach	Strategies
Budget shifting	Reducing population coverage: removing entitlement to some or all statutory benefits from specific groups of people Reducing service coverage: excluding benefits, use of positive or negative lists Reducing cost coverage: introducing or increasing user charges Public budget shifting: moving budgets across level of government, moving from health to social services budgets, tax incentives for private health insurance
Budget setting	Overall budget cap at government level Budget caps by health care sector Budgets at purchaser level Individual patient budgets Changes in provider payment methods: shifting to capitation or salary, linking payment to performance
Direct and indirect controls of health care supply	Price controls: setting prices, price or reimbursement rate cuts Volume controls: infrastructure, human resources, technology Health technology assessment to set priorities, influence coverage decisions, or guide clinical practice Practice guidelines

SOURCE Adapted from Mossialos E, Le Grand J. Health care and cost containment in the European Union (Note 6 in text).

or local level. In some cases, budget shifting may simply reduce certain public expenditures but not reduce overall health costs.

The four countries we studied have generally approached coverage decisions with caution, showing some reluctance to create financial barriers to access and, increasingly, a desire to base decisions on evidence of value.

►**POPULATION COVERAGE (UNIVERSALITY):** None of the four countries has opted to remove entitlement to publicly financed health care from specific groups of people. In fact, as the United States has done, France and Germany have introduced measures to secure universal coverage.

France changed the basis for entitlement from employment to residence in 2000, and Germany made health insurance mandatory for the whole population in 2009. Germany has also tried to protect the finances of public health insurance by prohibiting anyone who opts for private insurance from returning to public coverage once he or she reaches age fifty-five.

►**SERVICE COVERAGE:** Removing items from the publicly financed benefit package has been a common strategy across the four countries. All four have lowered coverage in service areas such as dental care. All four have also tried to be more systematic in defining benefits, refusing to include new interventions that lacked evidence of effectiveness and cost-effectiveness or—less commonly—excluding previously accepted interventions without such evidence.

It has proved politically difficult to remove benefits from coverage. In France it took almost twenty years to delist drugs that had been assessed as ineffective. In Germany a policy to exclude dental care from coverage introduced

in 1998 was reversed the following year. At the same time, Germany has expanded its benefits package. For example, it has added hospice benefits, immunizations, and long-term care for people with dementia.

►**COST COVERAGE:** Reducing the public share of benefits' cost by introducing or increasing user charges—that is, patient cost sharing—is a long-standing strategy adopted by all four countries, particularly for pharmaceuticals. In the period under review, all four countries increased existing user charges. Three also introduced new user charges: France introduced deductibles calculated per service; Canada applied and increased user charges for prescription drugs; and Germany did the same for physician visits.

The user charge policies of these four countries have mainly aimed to contain costs by deterring use. In England and France the policies were also intended to raise revenue.

However, the countries have tried to protect people from the negative effects of user charges in a variety of ways. In Canada the province of Alberta abolished charges for the main client groups of the Alberta Drug Plan in 2004. England announced in 2008 that user charges would not rise faster than inflation.

Germany introduced a cap on out-of-pocket payments for health care, set at 2 percent of household income in general and at 1 percent for people with chronic conditions. Germany also abolished user charges for hospice care and expanded entitlement to long-term care for people with dementia.

France removed entitlement to free care for severe hypertension and raised caps on out-of-pocket spending. However, it also introduced

free complementary private insurance covering user charges for people with very low incomes, and it subsidized this private coverage for people with low incomes. Private insurance in France now covers approximately 94 percent of the population.⁴

Overall, there were small shifts in both directions in the share of total health spending accounted for by out-of-pocket payments (Exhibit 1). In Canada and the United Kingdom out-of-pocket payments dropped two percentage points. In Germany they rose two percentage points, and in France they remained the same.

► **PUBLIC BUDGET SHIFTING:** Each of the four countries has moved financial responsibility for some health care services from one administrative level to another. France shifted responsibility for subsidizing long-term care for older people from the central to local governments in 1997.

The governments of many Canadian provinces experimented with shifting their budgets for some services to regional health authorities. More recently, however, the provinces have reduced the number of regional health authorities, and in the case of Alberta there is now just one such authority.

In 2004 Germany moved the funding of in vitro fertilization from statutory health insurance to the federal government. In 2012 England handed responsibility for public health budgets to local governments.

Again, there is little evidence that any of this budget shifting contained costs.

BUDGET SETTING Budget setting aims to create an upper limit on third-party payer spending, either at the level of the health sector as a whole or for specific service areas. There is no clear pattern of budget setting across our study countries, but all four have introduced payment for hospitals based on activity (diagnosis-related groups). Activity-based funding has probably softened budget constraints.

Policies in England and France have emphasized linking provider payment to evidence of quality.

► **BUDGET CAPS:** England has always used a national budget cap to control public spending on health care, but it does not set budgets by sector. Instead, local purchasers are able to determine how to spend their own “soft” or target budgets—called *target* because the budget is subject to review or renegotiation partway through the cycle.

In 1997 France introduced a national cap on statutory health insurance expenditure. This cap includes spending limits for six sectors.

Germany has no national budget-setting process. However, it has made extensive use of

sectoral budgets for hospitals and ambulatory care, the latter at the regional level. In recent years the constraints imposed by these budgets have been eased by the use of diagnosis-related groups to pay hospitals and by setting regional ambulatory care budgets based on prior use of services.

Canadian policy has varied by province. Generally, soft budget caps are used at the regional and hospital levels.

► **PROVIDER PAYMENT:** All four countries have introduced considerable changes to the ways in which providers are paid, moving toward activity-based hospital payments, as discussed below. France and Germany have reformed the way in which pharmacists are paid, to give them incentives to dispense lower-cost drugs instead of more expensive ones. In countries that mainly pay primary or ambulatory care providers on a fee-for-service basis (all except England in our sample), there have been small shifts toward capitation payment.

Linking payment to performance has been an important development in England, mainly for general practitioners but increasingly for hospitals; in Ontario, for general practitioners; and in France, for office-based physicians. England and Germany have experimented with cash payments or individual budgets, such as personal spending accounts, for long-term care. Such payments or budgets enable people to choose or purchase services to meet their care needs.

DIRECT AND INDIRECT CONTROLS OF HEALTH CARE SUPPLY Policy makers can attempt to contain costs by controlling the way in which providers supply health care. Controls can be direct, in the form of rules or regulations, or indirect, such as practice guidelines that are not mandatory.

All four countries have central mechanisms to set prices for health care. Prices are set or agreed on through negotiation at the national or regional level instead of being determined by individual purchasers and suppliers.

Controlling pharmaceutical prices is a priority in each of the four countries we studied, as discussed below. All four have used a range of strategies to try to control physician remuneration—including rate freezes, which France imposed between 1998 and 2005, England and Germany used in 2011 and 2012, and Ontario imposed in 2012. France, Germany, and Ontario have also used budget caps.

Germany has used controls on the volume of care that will be reimbursed by third-party payers in the pharmaceutical sector. France has cut the number of hospital beds, encouraged early retirement to reduce the number of self-employed physicians, and increasingly tightened volume

All four countries have built on strategies employed in the 1990s, and budget and price controls continue to be used.

controls in the pharmaceutical sector.

In the 1990s there was a general trend across Canada to restrict the supply of human resources for health care. Since 2000, however, Canada has focused on increasing the supply of doctors and nurses through expanding places in medical and nursing schools and recruiting health workers internationally.⁸

Health technology assessment supports evidence-based decision making by summarizing information about health care interventions in a systematic, transparent, unbiased, and robust way. A growing part of each country's health spending determinations, health technology assessment aims to inform the development of safe, effective, and cost-effective health policies.

All four countries develop and issue evidence-based practice guidelines to help inform decision making, but there is variation across countries in the implementation, scope, and take-up of the guidelines.

Assessing A Decade Of Developments

Our review reveals that all four countries have built on strategies employed in the 1990s and that budget and price controls continue to be used extensively. However, we also observed the increased use of policies intended to promote more efficient use of health care services. Within budget setting we observed a move toward activity-based funding for hospitals. Within direct and indirect control of supply, there has been an increase in health technology assessment and pharmaceutical spending controls.

It is not possible to fully determine how effective the cost containment strategies were over this period since we cannot know how rapidly health care costs would have grown without them. Actual health care costs grew more slowly than would have been projected based on growth in the previous decade in France and Germany, at about the same pace as in the previous decade in

the United Kingdom, and faster in Canada.⁷

There is, however, general evidence about the effectiveness of these strategies. Some strategies had multiple objectives, including improving quality and increasing volumes, so it is possible that although they had limited effects on costs, they met other objectives.

ACTIVITY-BASED FUNDING There was a move toward funding based on activity or diagnosis-related group to replace global budgets for hospitals in England, France, and Canada and to replace per case and per diem hospital payments in Germany. In most jurisdictions activity-based funding had multiple goals, including increased efficiency, quality, and transparency. In some cases, it was also used to increase service volumes and lower waiting times.⁹ Not all of these goals are compatible in the short term with bringing costs down.

There has been considerable research on the benefits and costs of activity-based funding in European health systems.¹⁰ Evidence on the effect of using diagnosis-related groups on overall system costs, as distinct from per unit costs, is more difficult to ascertain. However, there is some evidence of higher overall costs in France.

The move to activity-based funding in Canada has only just begun. It is therefore too early to determine the effect on costs in that country.

HEALTH TECHNOLOGY ASSESSMENT All four countries have continued to develop and make more use of health technology assessment to inform coverage decisions, provide recommendations to policy makers, and guide clinical practice. Greater use of such assessments was expected to slow the rate of expenditure growth by prioritizing the uptake of technologies assessed as being cost-effective. Organizations conducting health technology or related assessments have also begun to tackle the issue of providing evidence-based guidelines for health care providers.²⁻⁵

The National Institute for Health and Clinical Excellence was established in England in 1999 to ensure that treatment decisions would be based on the best available clinical evidence. At first, the institute directed its attention to the use of new drugs. However, it soon began to develop guidelines for other forms of treatment, and in 2005 its role was extended to providing guidance on the promotion of good health and the prevention of ill health.

Canada has created or expanded health technology assessment organizations since 2003, including the Canadian Agency for Drugs and Technologies in Health, a national body, and specialized provincial agencies in Alberta, Ontario, and Quebec.

In France the National Health Authority was

established in 2004 as an independent agency to advise the Ministry of Health and public health insurers about the clinical value of services, goods, and procedures. It also audits and accredits health care professionals and firms. The use of economic evaluation was explicitly added as a criterion in 2008, although it was rarely used until it became mandatory in 2012.

Germany set up the Institute for Quality and Efficiency in Health Care in 2004—another independent body reporting to government—to evaluate the quality, effectiveness, and efficiency of health services. The institute's focus includes diagnostics, therapeutics, and pharmaceuticals.¹¹

Evidence of the effectiveness of health technology assessment in England suggests that its potential for cost containment has not been realized. Few new technologies have received negative appraisals in England. Fifteen percent, or 72 of 481, were rated “not recommended,” and 5 percent were recommended for use “only in research,” between March 2000 and January 2013.¹²

In cases where the National Institute for Health and Clinical Excellence has recommended restricting the use of technologies, there have been some savings to the National Health Service. However, part of the cost has been shifted to patients, most controversially for certain cancer drugs.¹³ Therefore, although the government has encouraged the economic evaluation of new technologies and since 2002 has insisted on the use in England of the institute's guidance—although it is a matter of some debate whether National Health Service providers actually follow that guidance—there is little evidence that this approach has contained overall health care expenditure growth.¹⁴

PHARMACEUTICAL SPENDING Although countries have been concerned about pharmaceutical spending for many years, we observed some interesting changes in the way the four in our study managed these costs during 2000–10. All four have explicitly negotiated and worked with pharmaceutical companies and resellers—such as pharmacies—on prices, policies, and rebates.

France had been pursuing these approaches for some time. The other three countries ramped up their efforts at price control during the study period, experimenting not only through the negotiations mentioned above but also through reference pricing, for example in Germany and British Columbia, Canada. In reference pricing the payer sets a maximum reimbursement (reference) price for a cluster of interchangeable or similar prescription drugs, and patients pay the difference if they opt for drugs in the cluster that cost more than this price. Reference pricing thus

encourages users to choose lower-cost drugs.

In addition to reference pricing, there was movement toward other value-based approaches to pricing drugs, in which a drug's clinical value and cost-effectiveness are used to negotiate its price or set reimbursement levels. France has refined its system of basing a prescription drug's coinsurance rate on the relative clinical benefit it provides. And, beginning in 2013, England will replace its pharmaceutical profit control scheme and price cuts with value-based pricing.¹⁵

All four countries have embraced the promotion of generic drugs, but to varying degrees. Local purchasers in England use financial incentives and advisers to encourage generic prescribing. In France office-based physicians have recently been given financial incentives to prescribe generics. Canada has adopted bulk pharmaceutical purchasing. And both France and Germany have adopted pharmacy payment reforms that encourage pharmacists to dispense lower-cost drugs.

The use of health technology assessment for pharmaceuticals has become particularly prominent. All four countries now evaluate the additional benefit of new pharmaceuticals relative to old ones, a process required for all new pharmaceuticals in Germany. England and Germany use health technology assessment organizations to inform pricing.

National evidence suggests that pharmaceutical cost containment strategies have had some success in reducing drug costs for public payers. The use of rebates and clawbacks—that is, efforts to recoup spending after certain thresholds have been exceeded—in England, Germany, and France have led to marginal savings.¹⁶ Evidence from Canada on the impact of reference pricing suggests modest cost savings in the province of British Columbia.¹⁷

Direct control of reimbursement rates for generic drugs appears to have had a slightly greater impact, with some estimates suggesting a 5 percent decrease in public expenditures in Ontario as a result of reforms.¹⁸ Drug coverage is not a universal entitlement in Ontario, but it is publicly financed for people over age sixty-five and people with low incomes.

In Germany policies aimed at lowering prices and the margins of drug distributors, restrictions on physicians' prescription practices and on pharmaceutical budgets, reference pricing policies, and increases in user charges such as coinsurance have all contributed to cost control.¹⁹

The effectiveness of France's policy of channeling patients toward drugs of greater effectiveness through cost sharing has been questioned. The apparent lack of effectiveness has stemmed

It seems unlikely that the US system will move toward the types of volume and price controls used in the countries examined here.

from the fact that private insurance covers cost sharing for 94 percent of the population, which blunts the signals created by tiered cost sharing.⁴

Policy Implications And Lessons For Other Countries

The past decade has been one of relative affluence for the countries we reviewed, particularly when compared to the budget scenarios they face over the next few years. It may not be surprising, therefore, that health care costs grew relatively quickly during 2000–10 and that there is limited evidence of the success of recent cost containment strategies.

That said, the four countries discussed here continue to make use of public budgeting and price-setting mechanisms to contain costs in the health care sector, as they have in previous decades. The greater use of public budgeting and price-setting mechanisms, along with the much higher public shares of health care financing in these countries, remain the greatest contrasts between them and the United States.

Our review also revealed that in 2000–10 the four European countries moved away from strategies that simply shifted costs to households through across-the-board budget cuts, rationing of services, and increases in user charges. We found a growing focus on the cost-benefit ratio through the greater use of health technology assessment, activity-based funding with centrally set prices, and value-based approaches to paying for drugs. Although these policies may not drive down costs, they are likely to produce more efficient use of health care resources in the future.

An important caveat is that many of the strategies reviewed here have multiple goals, including quality, efficiency, and cost containment. For example, most countries introduced activity-

based funding to improve efficiency, quality, transparency, and productivity—not necessarily to reduce costs, at least in the short term. A comprehensive review of the success or failure of such policies would need to consider their full impact across a variety of outcomes together with their original policy objectives. Such evidence should be an integral part of the policy-making process, but it is not readily available in many cases.

Activity-based funding often represents a shift from harder to softer budgets, at least within the sector it funds, because total payments cannot be fully known ahead of time. Countries embarking on hospital payment reforms should note, therefore, that although evidence suggests activity-based funding has promoted more efficient use of health care resources, it is unlikely to contain costs without controls over volumes and prices.

Similarly, although the establishment of organizations to conduct health technology assessments has been an important step, there is little evidence that it has produced substantial cost containment. This may be because health technology assessment is primarily used to promote efficiency. However, these assessments can contribute to cost containment if they change practice patterns and result in disinvestment of services that are not cost-effective—goals that can be accomplished through greater use in the assessments of cost-effectiveness and cost-benefit analysis and broadening their use to go beyond new technologies alone.

In addition, policy coordination and information sharing across jurisdictions may help these four countries capture the potential benefits of health technology assessment. The European Network for Health Technology Assessment is one example of such coordination.²⁰

Our review suggests that the four countries have had some success in using a variety of public policy tools and that the United States may wish to emulate their policies to reduce the growth rate in drug spending. The policies include relatively simple levers such as large-scale negotiations with pharmaceutical manufacturers and sellers as well as budget caps. Our review also suggests that the United States may wish to use more challenging tools, such as cost-effectiveness analysis that sets prices for new technologies based on the technologies' relative value and value-based user charges.

Finally, health care reforms in the United States have focused on helping patients and providers use resources more efficiently. In a number of areas—such as the use of diagnosis-related groups and the development of quality, performance, and benchmarking indicators—the United States has provided valuable design les-

sons for other countries.

It seems unlikely, however, that the US system will move toward the types of volume and price controls used in the countries examined here. Thus, although the United States is also moving

toward policies aimed at changing the cost-benefit ratio and promoting economic efficiency, it is likely that the large gap in health care spending between the four countries in our study and the United States will remain. ■

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In this month's *Health Affairs*, Mark Stabile and coauthors offer an analysis of cost containment strategies adopted by four high-income countries—Canada, England, France, and Germany—in 2000–10 and suggest that these hold lessons for the United States. Drawing on a comprehensive analysis compiled by the European Observatory on Health Systems and Policies, the authors identify trends in all four countries toward more use of technology assessments and payment based on diagnosis-related groups and the value of products or services, among other strategies.

The authors write that these policies may result in a more efficient use of health care resources, but they are unlikely to contain costs unless combined with volume and price controls. The authors acknowledge that there is little likelihood that such controls will be adopted in the United States.

Stabile is founding director of the School of Public Policy and Governance and a professor of economics and public policy in the Rotman School of Management, both at the University of Toronto. He is also a research associate at the National Bureau of Economic Research, in Massachusetts, and a visiting professor at the London School of Economics and Political Science (LSE). His recent work focuses on the economics of child health and development, child

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