By Ravindra P. Rannan-Eliya, Chamara Anuranga, Adilius Manual, Sondi Sararaks, Anis S. Jailani, Abdul J. Hamid, Izzanie M. Razif, Ee H. Tan, and Ara Darzi

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Improving Health Care Coverage, Equity, And Financial Protection Through A Hybrid System: Malaysia's Experience

Ravindra P. Rannan-Eliya (raviofficelk@gmail.com) is executive director of the Institute for Health Policy, in Colombo, Sri Lanka.

Chamara Anuranga is a research associate at the Institute for Health Policy.

Adilius Manual is a research officer at the Institute for Health Systems Research, National Institutes of Health (NIH), in Selangor, Malaysia.

Sondi Sararaks is a senior medical officer at the Institute for Health Systems Research, NIH, Malaysia.

Anis S. Jailani is a research officer at the Institute for Health Systems Research, NIH, Malaysia.

Abdul J. Hamid is a research officer at the Institute for Health Systems Research, NIH, Malaysia.

Izzanie M. Razif is a research officer in the National Health Financing Unit of the Ministry of Health, in Putrajaya, Malaysia.

Ee H. Tan is senior principal assistant director of the Oral Health Division of the Ministry of Health, in Putrajaya.

Ara Darzi is executive chair of the World Innovation Summit for Health, Qatar Foundation, and director of the Institute of Global Health Innovation, Imperial College London, in the United Kingdom.

ABSTRACT **Malaysia has made substantial progress in providing access to health care for its citizens and has been more successful than many other countries that are better known as models of universal health coverage. Malaysia's health care coverage and outcomes are now approaching levels achieved by member nations of the Organization for Economic Cooperation and Development. Malaysia's results are achieved through a mix of public services (funded by general revenues) and parallel private services (predominantly financed by out-of-pocket spending). We examined the distributional aspects of health financing and delivery and assessed financial protection in Malaysia's hybrid system. We found that this system has been effective for many decades in equalizing health care use and providing protection from financial risk, despite modest government spending. Our results also indicate that a high out-of-pocket share of total financing is not a consistent proxy for financial protection; greater attention is needed to the absolute level of out-of-pocket spending. Malaysia's hybrid health system presents continuing unresolved policy challenges, but the country's experience nonetheless provides lessons for other emerging economies that want to expand access to health care despite limited fiscal resources.**

As nations consider how to achieve universal health coverage and address their dual concerns of adequate and equitable access to health care and financial risk protection,[1,2] little attention has been paid to Malaysia's example. An upper-middle-income Asian nation, Malaysia is well known for its achievements in improving maternal and child health.[3] Its experience in improving equity with limited fiscal resources and its particular mix of financing and delivery strategies can also enrich global knowledge on approaches to achieving universal health coverage.

International recommendations for financing universal health coverage stress the importance of relying predominantly on mandatory public financing to finance overall health spending and reducing the out-of-pocket share to prevent impoverishment and to ensure equity in financing and delivery.[1] Malaysia has not exploited its successful economic development either to adopt universal health insurance, as in the case of Japan and Taiwan,[4] or to use tax monies to pay for the expansion of government-funded delivery to cover almost all care, as in the case of the Swedish or British national health service (NHS) models. Instead, Malaysia has combined government-funded public delivery of services with the parallel delivery of privately funded private services; a low level of government financing for health (2.2 percent of gross domestic product

[GDP] in 2012); and reliance on a high share of financing from household out-of-pocket spending (35 percent of total expenditure on health).[5]

What are the distributional implications of such a combined public and private system that relies on a high share of financing from household spending? Does this hybrid approach result in unequal and limited access to care? Does out-of-pocket spending impoverish many people? In this article we use international criteria and empirical evidence to answer these questions, explain some apparent contradictions, and draw lessons for other countries.

Background

Malaysia is an ethnically diverse Southeast Asian nation of thirty million people. Malays and other indigenous groups make up 60 percent of the population, with the remaining 40 percent composed of descendants of mostly nineteenth-century immigrants from China and India. Malaysia follows market-oriented policies. Its economy grew, on average, 6.4 percent per year in the half-century beginning in 1960. Per capita income in constant 2000 US dollars more than tripled, from $1,756 in 1974 to $6,535 in 2011, and its GDP in current US dollars reached $12,000 per person in 2014.[6]

A former British colony, Malaysia developed extensive government health services beginning in the 1950s, and its private health care sector expanded beginning in the 1970s. This created a hybrid system, in which government taxation provides funds for the Ministry of Health to deliver health care by providers who are salaried employees, while for-profit hospitals, clinics, and pharmacies that are funded privately operate independently of the government.

All Malaysians are entitled to use government facilities, which provide a comprehensive range of services from preventive care and maternal and child health care to heart surgery and even treatment with Herceptin for breast cancer—although the supply of costly treatments may be limited. Public services are free or almost free: User charges are restricted to nominal fees for outpatient visits and inpatient stays that are the same regardless of the condition or complexity of care, cover less than 3 percent of the costs, and can be waived for poor patients. In 2011 the public sector treated 49 percent of outpatients and 74 percent of inpatients.[7]

Malaysians can opt out of the public sector and seek private care, and richer patients are more likely to do so than poorer ones. Private financing goes almost solely to private providers. Out-of-pocket spending accounts for 79 percent of private financing.[8] Third-party financing, by private insurance and employers that reimburse employees for using private providers or directly pay such providers, accounts for the remainder of private financing and mostly covers middle- or upper-income workers in the formal sector of the economy—that is, people in private-sector jobs with normal hours and regular pay.

Most health insurance is group insurance that substitutes for direct employer spending on health care. The pressures of adverse selection and moral hazard constrain the expansion of individual private insurance, which further limits the coverage of private primary care.

Total and government health expenditures in Malaysia are low for an upper-middle-income economy. In 2013 they amounted to only 4.0 percent and 2.2 percent of GDP, respectively.[8]

Study Data And Methods

DATA SOURCES To assess inequalities in coverage and financial protection, we used two sets of nationally representative household surveys undertaken by the government of Malaysia. The first is the Household Expenditure Survey, a survey of general household expenditures, including medical expenses, that is conducted every five years. We analyzed the most recent rounds of this survey—conducted in 2004–05 and 2009–10—which sampled 14,084 and 21,641 households, respectively.

The second is the National Health and Morbidity Survey, which surveys self-reported health status and health care use and spending by all individuals in selected households. We used the 1986 round of the survey (which sampled 13,149 households) and the 1996 (13,637 households), 2006 (15,571 households), and 2011 (7,852 households) rounds.

In addition, we refer to the World Bank's 1974 Distributive Effects of Public Spending survey, which was used in the first analysis of equity in health care use and spending in Malaysia.[9] This was one of the earliest such analyses of developing countries.

We ranked all respondents to the surveys according to socioeconomic status on the basis of relative living standards, grouping them into quintiles of equal population size when we tabulated the results. To do this, we used household expenditure, adjusted by an equivalence scale to allow for variation in the cost of living associated with household size and age composition.[10] Because the 1996 and 2006 rounds of the National Health and Morbidity Survey lacked data on household spending, we substituted data on household income.

DISTRIBUTION OF GOVERNMENT AND PRIVATE HEALTH SPENDING We used benefit incidence

analysis to measure the distribution of health spending.[11] Benefit incidence analysis usually focuses on government spending, but we extended the method to examine private spending as well.

The Malaysia national health accounts track estimated national health expenditures according to international standards,[12,13] disaggregating health expenditures by financing source, health care function, provider, and geographical region.[8] These estimates provided, for the benefit incidence analysis, the values in 1997 and 2009 (the most recent year that was available) of each item of spending, such as the public expenditure on inpatient care at Ministry of Health district hospitals and out-of-pocket spending at pharmacies.

These items were then distributed across the population by different methods. Public spending on medical services was distributed according to the use of government facilities as reported by the National Health and Morbidity Survey, taking into account the type or identity of government facilities. Spending on population health was prorated across the national or relevant subnational population, assuming that the spending benefited all people equally. Private expenditures were distributed according to the use of private-sector care or out-of-pocket spending as reported in the National Health and Morbidity Survey. Further details of our methods are available elsewhere.[7]

DETERMINING FINANCIAL RISK PROTECTION If people spend large amounts of money out of pocket to obtain medical care, these expenditures can cause financial hardship. To assess financial hardship, we used two commonly used metrics.[11] First, we estimated the catastrophic impact of such spending as the percentage of the population whose household out-of-pocket health spending in a given month was more than a specified percentage of their total nonfood spending. And second, we estimated the impoverishing impact of the spending as the percentage of the population whose household health spending in a given month forced their nonhealth spending below the two-dollar international poverty line defined by the World Bank.[14]

LIMITATIONS Our study had several limitations. First, the 1986 National Health and Morbidity Survey and the 1974 Distributive Effects of Public Spending survey excluded eastern Malaysia, which would create upward bias in the reported private-sector share of health care use in these surveys.

Second, the National Health and Morbidity Survey also suffers from lack of consistency in its wording, which makes comparisons across rounds unreliable. To mitigate this, we report here only findings based on survey questions that were similarly worded and used similar reference periods.

A third limitation is nonsampling reporting bias in interview surveys, which produces under- or overreporting of the use of health services. The survey research literature shows that this bias is related to factors such as the length of the recall period and the wording of questions.[15,16] Consistent with that literature, in the 2011 National Health and Morbidity Survey public-sector outpatient visits were overreported by 2 percent, while public-sector inpatient use was underreported by 24 percent. Accordingly, when we discuss absolute rates of use, we adjust survey self-reported rates by triangulation with government administrative data on public-sector health care visits, following the method used by the Organization for Economic Cooperation and Development (OECD) when reporting statistics on the use of health care.[17] Although the literature also indicates that reporting bias can vary by respondents' socioeconomic status,[15,16] the probable size of this effect is unlikely to alter our substantive findings.

Finally, we note that we were unable to assess the quality of clinical care in the Malaysian system, which limits some of our conclusions about overall performance.

Study Results

HEALTH OUTCOMES AND HEALTH SERVICE COVERAGE World Health Organization (WHO) statistics[5] and other studies[3] show that population health outcomes are better than expected in Malaysia, given the country's income level, and that key indicators such as infant mortality and life expectancy approach those of OECD nations (Exhibit 1). Child and maternal health indicators have improved dramatically,[3,5] with child mortality falling more than 75 percent between the 1970s and 2010s. Malaysia provides universal access to preventive and essential care and maternal and child health interventions (antenatal care and skilled birth services, well-child visits, and child immunizations). The public sector provides these services at no charge, and rates of using the services are similar to those in high-income countries (Exhibit 1).

Individual use of ambulatory and inpatient medical treatment is high in Malaysia. Making the reasonable assumption that the private sector was small and underdeveloped before 1970, we estimated that annual outpatient visits increased from less than one per capita in the 1930s to just under two per capita in the 1970s and more than four per capita in the 2010s (for estimated annual rates, see online Appendix Exhibit A1).[18] The 2011 rate is higher than rates in

EXHIBIT 1

Health spending, service coverage, and outcomes in Malaysia and selected countries, 2011–13

	Malaysia	Thailand	Turkey	Mexico	UK	Brazil	Japan	US
Total health spending (% of GDP)	4.0	4.5	5.4	6.1	9.3	9.5	10.3	17.0
Government health spending (% of GDP)	2.2	3.6	4.1	3.2	7.8	4.5	8.4	8.0
Out-of-pocket spending (% of TEH)	34	12	15	44	9	30	14	12
Births attended by skilled health personnel (%)	99	100	91	100	99	99	100	99
Measles vaccination rate of infants (%)	95	99	98	89	95	99	95	91
Annual outpatient consultations with doctors per capita	4	2	8	3	5	3	13	4
Annual inpatient discharges per 1,000 population	111	137	161	48	129	56	111	125
Infant mortality rate (deaths per 1,000 live births)	7.2	11.3	16.5	12.5	3.9	12.3	2.1	5.9
Life expectancy at birth (years)	74	75	75	75	81	75	84	79

SOURCES Authors' analysis; and data from the following sources: World Health Organization. World health statistics 2015 (Note 5 in text); Organization for Economic Cooperation and Development. Health at a glance 2015 (Note 19 in text); World Bank. World development indicators 2015 (Note 6 in text). **NOTES** Countries are ranked in order of increasing health spending (as a percentage of gross domestic product [GDP]). TEH is total expenditure on health.

OECD nations such as Sweden and Mexico and similar to rates in the United Kingdom and the United States.[19] Inpatient utilization also increased, reaching a rate of 111 discharges per 1,000 population in 2011, which is comparable to rates in OECD nations such as the United States and Japan.[19]

INEQUALITIES IN USE OF PERSONAL MEDICAL SERVICES This high use of health services is equally distributed across income groups, but with contrasting utilization gradients in the public and private sectors (Exhibit 2). Use of private services is pro-rich in that the use of these services increases with household income, while use of public services is pro-poor in that the use of those services increases the poorer the household.

The poorest 50 percent of the population accounts for two-thirds of outpatient visits to public facilities, while the richest 50 percent accounts for two-thirds of private visits. The greater use of private services by the rich is unremarkable, but the greater use of public services by the poor is unusual, and public services in Malaysia are more pro-poor than is the case in most Asian countries.[7] Our analysis found considerable stability since 1986, while a comparison with 1974 data[9] suggests that since the 1970s public-sector utilization has become more pro-poor and the use of private services less pro-rich (for details of how inequalities in utilization by quintile have changed from the 1970s to 2011, see Appendix Exhibit A2).[18]

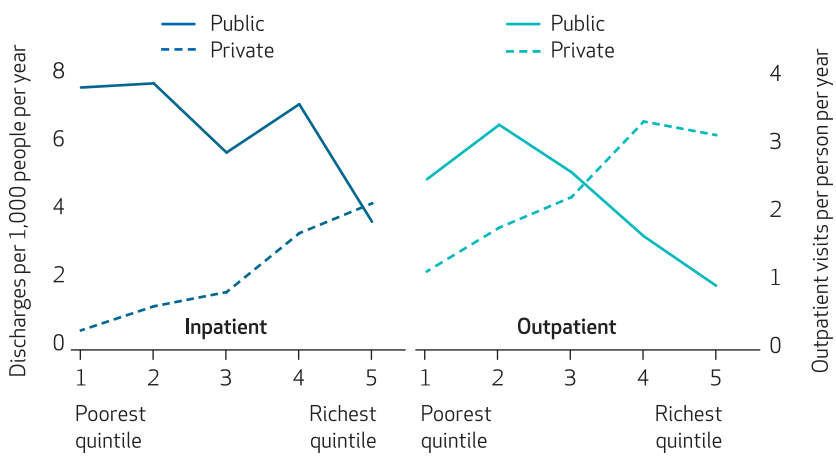
We note that this does not necessarily mean that access is equitable: Data limitations prevented us from taking health care need into account, which would be required to determine equitability. Nevertheless, the overall equitability contrasts with the generally pro-rich use of all (that is, public and private combined) health services in most developing countries.[20]

INCIDENCE OF HEALTH SPENDING Government expenditures on health were modestly pro-poor in 2009, which reflects the pro-poor use of public services (Exhibit 3). This distribution is the second most pro-poor in Asia, after Hong Kong.[21] This is wholly due to Ministry of Health expenditures (21 percent of which benefit the poorest quintile, and 43 percent of which benefit the poorest two quintiles), with expenditures by other government agencies, such as university hospitals, being modestly pro-rich. A comparison of the results for 2009 with those for 1997 and World Bank estimates for 1974 again indicated little change over time.[7,9]

In contrast, private expenditures were strong-

EXHIBIT 2

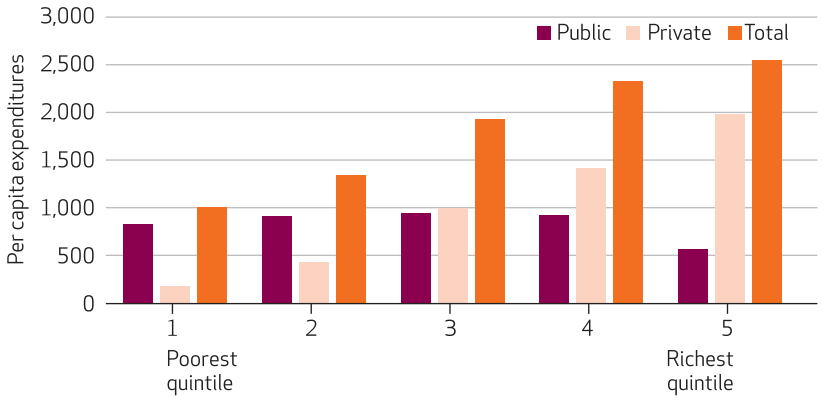
Use of public and private medical services in Malaysia, by socioeconomic quintile, 2011



SOURCE Authors' analysis of data from the 2011 National Health and Morbidity Survey in Malaysia.

EXHIBIT 3

Distribution of public and private health expenditures in Malaysia, by socioeconomic quintile, 2009



SOURCE Authors' analysis of data from the 2011 National Health and Morbidity Survey in Malaysia and the 2009 Malaysian national health accounts. **NOTES** Per capita spending is in Ringgit (one Ringgit was equivalent to US $0.29 in 2009). The concentration index quantifies the degree of socioeconomic-related inequality in a health variable. Values range from −1 (complete inequality, in which the variable is concentrated in the poorest person) through 0 (equality) to +1 (complete inequality, in which the variable is concentrated in the richest person). Across quintiles the index was 0.06 for public expenditures and 0.40 for private expenditures. Overall it was 0.19 for total expenditures, with the difference from zero being significant ($p < 0.001$).

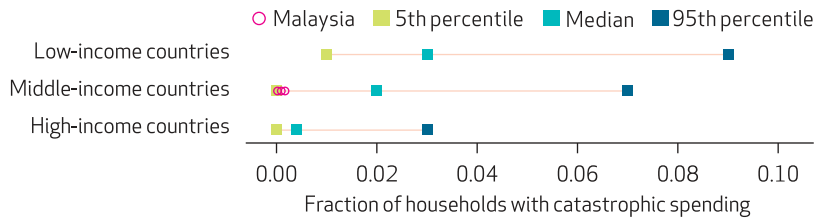
ly pro-rich in 2009 (Exhibit 3). Only 12 percent of all private spending financed health services for the poorest two quintiles, while 38 percent was for treatment used by the richest quintile. Private insurance was even more skewed toward the rich than out-of-pocket expenditures were. The end result is that the distribution of all health spending is pro-rich.

FINANCIAL RISK PROTECTION The incidence of catastrophic health expenditures in 2009–10 was low. This was true according to various ways of defining people who experience catastrophic health expenditures—ranging from the 0.2 percent of the population whose households spent more than 25 percent of their total spending on health in the previous month to the 7.1 percent of the population whose households spent more than 5 percent of their nonfood spending on health in the previous month. This incidence has declined from the levels observed in the period from the 1980s to the early 2000s. The incidence of impoverishing expenditures was just as low as that of catastrophic expenditures, with only 0.2 percent of the population facing impoverishing expenditures in the previous month (for further details about incidence of catastrophic and impoverishing expenditures, see Appendix Exhibit A3).[18]

These estimates of financial risk in the Malaysian health system are lower than such estimates in many other emerging economies regarded as having achieved universal health coverage, including Brazil, Mexico, Taiwan, Thailand, and Turkey.[22–24] They confirm earlier WHO analyses that found that Malaysia performs well even in comparison with OECD nations, with its incidence of catastrophic spending by households comparable to that in countries such as Denmark and Sweden.[25, 26] In combination, these findings demonstrate that Malaysia's health system does extremely well in providing financial risk protection compared to systems in other countries at all income levels (Exhibit 4).

EXHIBIT 4

Variation in the incidence of catastrophic spending in Malaysia and other countries arranged by World Bank income levels



SOURCE Estimates for Malaysia from authors' analyses of the 2004–05 and 2009–10 Malaysia Household Expenditure Surveys and a 2013 analysis by Ng Chiu-Wan (University of Malaya) of the 1998–99 Malaysia Household Expenditure Survey for the Equitap Network. Estimates for Malaysia in 1993–94 and for all other countries were reported by Xu K, et al. Protecting households from catastrophic health spending (see Note 25 in text). **NOTES** World Bank income levels are from 2003. The data source used to determine these levels is no longer available; however, the World Bank has consistently classified Malaysia as a middle-income country during the years covered by our data.

Discussion

FINANCIAL RISK PROTECTION Experts from the WHO argue that the share of the total expenditure on health that comes from out-of-pocket spending is a key proxy indicator of the level of financial risk[27] and that countries need to bring this share that is from out-of-pocket spending below 15–20 percent to reduce financial risk to negligible levels.[28,29] However, Malaysia demonstrates that it is possible for a health system to achieve high levels of financial risk protection despite having higher shares of out-of-pocket spending than suggested by the WHO (Exhibit 1). How can this be explained?

The explanation appears to be that the ratio of out-of-pocket spending to the total expenditure on health is not a reliable proxy indicator for financial protection of households. Better proxies would be the ratios of out-of-pocket spending to national or household resources, since financial risk is ultimately related to the resources that a household or population has to absorb any given medical expense.

The 2009 level of out-of-pocket spending in GDP in Malaysia (1.7 percent) is low by global standards, average for the members of the

OECD, and comparable to countries such as Austria (1.8 percent) and Sweden (1.6 percent).[30] Given that this ratio in Malaysia is similar to those in most European nations, it should not be surprising that Malaysia's level of financial risk is comparable to the levels in those nations.

Malaysia's ratio of out-of-pocket spending to the total expenditure on health is high only because its public expenditure on health is low. For any given level (per capita or percentage of GDP) and distribution of out-of-pocket spending, there is no reason to expect that the share of the total expenditure on health that comes from the government should affect financial risk at the household level. The Malaysian case indicates that a focus on reducing the ratio of out-of-pocket spending to GDP may be more effective for improving financial protection than a focus on reducing the ratio of out-of-pocket spending to total spending on health.

An additional explanation for financial protection in Malaysia is that out-of-pocket spending is concentrated in Malaysia's richest households. Out-of-pocket spending is progressive, in that its percentage of household budgets increases with income. The poorest 60 percent of the Malaysian population accounts for only 20 percent of out-of-pocket spending, while the richest 20 percent of the population accounts for 59 percent of such spending.[7] Items more likely to result in catastrophic expenses, such as private inpatient care, are even more concentrated in the richest households. This pattern stems directly from the hybrid structure of Malaysia's system, in which poorer Malaysians can always obtain potentially catastrophic care from the government's health facilities, which provide a full range of health care services, while better-off Malaysians—who are less likely to suffer hardship—can choose to use private care.

ACHIEVING EQUITY WITH LOW LEVELS OF GOVERNMENT SPENDING The WHO, international experts, and others often argue that pooled financing—that is, public and other non-out-of-pocket financing—of 5–6 percent of GDP is required to ensure universal access to health care.[28, 31] These arguments usually assume that public financing funds a single system of services for all citizens. The ability of Malaysia to attain equal access to a relatively high volume of services with government spending equal to only 2 percent of GDP challenges this notion.

The explanation of equal access with low government spending again lies in Malaysia's hybrid system. This system exploits differences in the demand for nonclinical aspects of quality (that is, consumer quality) between the poor (who cannot afford to pay for their own care) and the nonpoor (who can). The nonclinical aspects of quality include the level of congestion at health care delivery sites; the length of waiting times for health care; the amount of choice of doctors; and the quality of amenities, such as the cleanliness and size of waiting areas and washrooms and the availability of a private inpatient room. In Malaysia, demand for consumer quality, which is independent of clinical effectiveness (which, in turn, is harder for patients to assess), and dissatisfaction with the quality of public health care services increase with income.[32] Richer Malaysians voluntarily seek higher consumer quality in the private sector, and the fact that this choice is voluntary contributes to the system's political acceptability.

This system creates inequity in access to high consumer quality (and in overall spending), but it means that the low amount of government health spending can preferentially benefit the nonrich and equalize health care utilization across the income range. To the extent that the government's first concern may be to equalize access to health care of adequate clinical quality, this approach is effective, given its low level of spending and the broad and relatively equal coverage it achieves.

STABILITY OF THE PUBLIC-PRIVATE MIX Our analysis revealed remarkable stability of the public-private mix of health services over time. Between the mid-1970s and early 2010s, per capita income more than tripled, overall use of medical services more than doubled, and child mortality fell by more than 75 percent—yet government expenditures on heath remained at 2 percent of GDP, and the overall pattern in the use of public and private providers hardly changed.

This stability suggests that the public-private mix in Malaysia is driven by individuals' relative, interpersonal income differences, not their absolute income levels. As incomes grew, the Malaysian government increased its spending, but only enough to raise the levels and quality of public health care sufficiently to satisfy the demands of the poorer section of the population, whose expectations presumably also increased over time. As a consequence, an equally stable and richer segment of the population, whose expectations also increased, has remained both dissatisfied with public health care and able to pay for private care.

Policy Implications

Malaysia's health outcomes are good for its income level, equaling those of some OECD nations. Its health outcomes are combined with access to and volumes of utilization of health care comparable to those in OECD nations, relatively equal use of medical services,[33] and levels

of financial protection comparable to the OECD nations and better than those levels in many emerging economies that are often presented as role models for universal health coverage.

It is reasonable to believe that this good access to care contributes to Malaysia's good health outcomes. Indeed, that belief is a key motivation in the global push for universal health coverage. The available data did not allow us to assess clinical quality, but the relatively good health outcomes in Malaysia and the absence of evidence to the contrary suggests that the quality of care is no worse there than in other upper-middle-income countries.

These findings alone justify adding Malaysia to the list of better-known countries to be looked at for lessons on how to achieve universal health coverage. But what makes Malaysia's experience notable and especially relevant to fiscally constrained developing nations is the modest level of its government spending on health care. However, this limited government financing has different implications for internal and external observers.

For the global audience, Malaysia's health system offers important lessons on how developing nations with limited fiscal resources might still make substantial progress toward universal health coverage. Malaysia's experience suggests that a hybrid system in which the government funds and delivers a comprehensive set of effective medical services that is genuinely available to all, while a self-funded private sector meets the demands of the better-off for higher consumer quality than the public sector can afford to offer, may be one way to achieve high and equal levels of coverage before attaining high levels of public financing. The government implicitly matches its health care budget to the need for public-sector care by skimping primarily on consumer quality, which allows it to concentrate its subsidies on the poor. The nonpoor pay twice—directly in out-of-pocket spending on their own care, and indirectly in taxes to pay for the universal public provision of care that ends up disproportionately benefiting the poor because the nonpoor opt out of public care. In contrast, the poor pay little, either directly in out-of-pocket spending or indirectly in taxes. The distribution of the payment burden is similar to that in most systems that provide universal health care, except that the nonpoor pay directly for their care out of pocket instead of indirectly through taxes or insurance contributions.

Malaysia's hybrid system provides a real-world validation of a theory expounded by Timothy Besley and Stephen Coate.[34] They argued that under certain conditions, a system of public service provision that is equally available to all citizens can effectively redistribute health services from rich to poor and equalize access as long as the nonpoor have a higher demand for consumer quality than the poor do and voluntarily choose, on the basis of inadequate consumer quality, not to use the free public service. Besley and Coate also showed that such an approach might be the most efficient way of ensuring equitable provision of public service if the government's budget was insufficient to provide the service to everyone and if it was difficult to assess an individual's income so as to means-test access. Such Besley-Coate arrangements have been identified in Sri Lanka[35] and Hong Kong.[36] What Malaysia's case adds is evidence that these arrangements might also be effective in combining high levels of access to health care with financial risk protection, despite limited government spending.

Malaysia's experience offers hope to other countries about what can be achieved with limited public financing.

Nevertheless, this model has a significant limitation for many Malaysians. The inferior consumer quality in the public system engenders dissatisfaction among nonpoor patients.[32] Although they can and do opt out to purchase private services, the cost of doing so can also impose an unwelcome burden on middle-income and upper-middle-income patients, leading to discontent among them[32]—in contrast to the very richest patients, for whom costs are not a concern.

This presents a persistent problem for political leaders to manage and ultimately resolve, because the increased public spending that could mitigate this dissatisfaction by improving the consumer quality of public-sector services or by paying for the use of private services by poor and middle-income patients would lead to resistance from the better-off, who would have to pay higher taxes than before to subsidize the improved consumer quality for the bulk of the population.

The other comparable hybrid systems—those of Sri Lanka and Hong Kong—also face this dilemma.[35,37] This fact reflects an important differ-

ence in the evolution of these systems compared with that of the United Kingdom's NHS model that they are often wrongly assumed to have replicated. The pre-NHS financing and delivery of health care in the United Kingdom was very similar to the hybrid system described in this article. Crucially, however, in 1948 the United Kingdom increased public financing to provide universal access to most private services. For various reasons, the health systems of Malaysia, Hong Kong, and Sri Lanka have not emulated that shift.

Despite that failure and the consequent problem of dissatisfaction with public-sector quality and private-sector costs by the nonpoor, these three health systems have been able to maximize coverage and equity. Malaysia's experience offers hope to other countries about what can be achieved with limited public financing, but at the same time it underlines the limits of the Malaysian strategy.

Conclusion

Clearly, not all governments can translate limited public funding into effective public services that are fully accessible by the poor. More knowledge is needed about how Malaysia and other countries have achieved this goal, even if only some lessons are transferable to other countries.

A key element of this approach in all of the health systems that have followed it, including Malaysia's, is its dependence on public services' being inferior to private services in terms of consumer quality. At the same time, recent research suggests that these systems can combine inferior consumer quality with equal or better clinical quality in the public sector as compared to the private sector, thus minimizing inequality in access to effective medical care.[38,39] Although evidence about clinical quality in Malaysia is lacking, the similarity of its health system to those of Sri Lanka and Hong Kong makes this a reasonable speculation that warrants further research. Still to be clarified is how such systems, which may include that of Malaysia, maintain such a quality trade-off. ■

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18 To access the Appendix, click on the Appendix link in the box to the right of the article online.

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