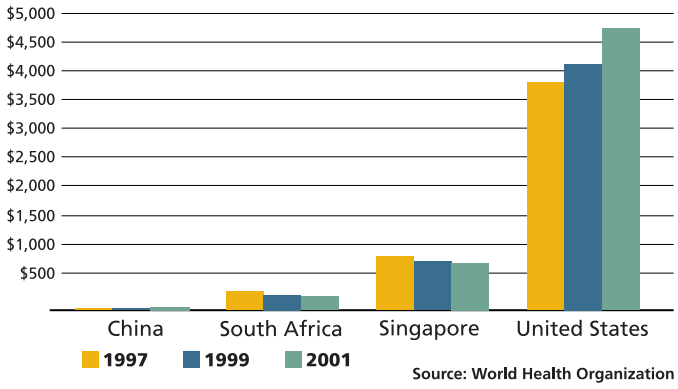
International Comparisons:
Impact of HSAs on Costs and Utilization in Three Countries

The United States isn't the first country to experiment with individually owned health savings accounts and other consumer-driven strategies. Singapore laid the groundwork to shift health care costs from the government to individuals and the private sector in 1984. South Africa opened the door to medical savings accounts in 1994. They now account for half of the private insurance market. China has tested health savings accounts and 20 percent copayments on expensive diagnostic tests since 1996.

Per Capita Health Care Expenditures



Source: World Health Organization

In two of the three countries – Singapore and South Africa – health care expenditures declined between 1997 and 2001, even as U.S. costs increased. More interestingly, per capita health expenditures in both Singapore and South Africa declined every year between 1997 and 2001, while per capita health care expenditures in the United States increased every year. China's per capita health expenditures followed the same pattern as the United States, but its consumer-driven strategies at the time were confined to less than one-tenth of 1 percent of the nation's population.

What role have consumer-driven strategies played in containing health care costs in Singapore and South Africa and how have they impacted the two cities in China where the pilot projects were implemented? The Annual Report examined the experience of consumer-driven strategies in each of the three countries.

Singapore

Singapore implemented mandatory health care savings accounts in 1984. Depending on their age, employees must contribute between 6 percent and 8 percent of their salary to their Medisave account, which is then matched by their employers. The account can be used to pay for inpatient costs, chemotherapy and psychiatric care, as well as for some outpatient costs. If an individual depletes his or her account, family members can pool their Medisave balances to help pay the individual's medical bills.

Population: 4.1 million

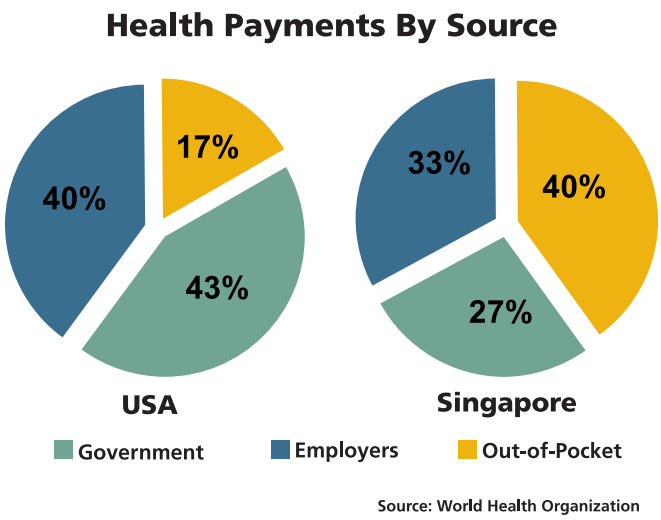
Square Miles: 240

By 1999, these accounts had accumulated more than $12.6 billion (U.S. dollars), an amount equal to four times the island nation's total national health expenditure for that year. The average Medisave account balance was $469 USD.

Twenty years after the implementation of Medisave accounts, Singapore's health care system appears to be healthy – and so does its citizenry. According to a 1996 report done for the National Center for Policy Analysis, Singapore's hospital admission rate was approximately 1.10 per 1,000 people. Singapore physicians earn approxi-

mately the same as physicians in the United States on a relative basis and the country's citizens seldom have to wait for access to modern technology and procedures.

Singapore spends far less on health care than does the United States. Health care spending represented just 3 percent of the island nation's gross national product (GNP) in 1996, compared to 14 percent for the United States. More impressively, Singapore's health care spending decreased 13 percent between 1997 and 2001 (from $936 to $816 per capita) even as health care spending in the United States increased 24 percent (from $3,939 to $4,887 per capita), according to data from the World Health Organization.



Source: World Health Organization

However, there are several important distinctions between Singapore and the United States. The first is size. Singapore is a small, 240-square-mile island at the tip of the Malaysian peninsula with a population of 4.1 million and fewer than 30 hospitals. Singapore residents are also younger. In 2000, 16.7 percent of Singapore's population was 65 years or older, well below the 27.2 percent share found in the United States.

More than 80 percent of the nation's hospital beds are overseen by the Ministry of Public Health. This allows the government to regulate the introduction of technology, control prices and restrict the number and "mix" of specialty physicians. In addition, the government purchases health care services through Medishield, which provides catastrophic health care insurance for older citizens who pay age-based premiums; and Medifund, which helps cover the health care costs of poor people. The government also provides subsidized outpatient care, although most citizens receive their outpatient care at private clinics.

While Singapore is home to the longest running experiment with individually owned medical savings accounts, these accounts are not the sole reason for the nation's low – and declining – health care costs.

While the government operates the majority of hospitals, it expects residents to pay a portion of their inpatient costs. Hospitals offer five levels of care, with each tier receiving a different level of government subsidy. For example, the government covers 80 percent of inpatient costs for basic inpatient care, which is provided in large, open wards where patients do not get to choose the physician that sees them. The subsidy decreases as the amenities increase. Class A, which provides the highest level of care with private, air-conditioned rooms and patient-selected physicians, receives no government subsidy. Patients use their Medisave accounts to upgrade their level of care.

While Singapore is home to the longest running experiment with individually owned medical savings accounts, these accounts are not the sole reason for the nation's low – and declining – health care costs. In 1999, Medisave accounts paid for just 8 percent of all health care services, according to the World Health Organization.

Nonetheless, it could be argued that Singapore's system illustrates the effect of cost-sharing. Before 1984, the government provided free health care. Medisave, Medishield and Medifund were established to end this dependency, and it appears to have worked. The government's share of health care financing has dropped to 27 percent. Out-of-pocket costs, including Medisave, accounted for 40 percent of Singapore's health care expenditures in 1999, with employer benefits covering the remainder. Compare that to the United States, where out-of-pocket costs account for just 17 percent of health care expenditures.

South Africa

Population: 44 million

Square Miles: 1.9 million

Medical Savings Accounts (MSAs), which are virtually identical to health savings accounts (HSAs), have proven to be extremely popular in South Africa. Since their introduction in 1994, they have captured half of the private-sector market. Health plans that accompany MSAs in South Africa typically have deductibles for outpatient services and prescription drugs but provide first-dollar coverage for inpatient hospitalization and medications used to treat chronic conditions. Many plans also offer wellness programs with incentives for health club attendance, healthy behavior and other preventive measures.

Destiny Health, one of the leading providers of MSA plans in South Africa, has contracted with local centers of excellence to manage the care of diabetic members living in major metropolitan areas. In 2000, Destiny paid the centers about $80 (USD) per patient per month for treatment costs, including medications, consultations with physicians, dietitians and other specialists; and hospitalizations resulting from diabetic complications. The patient is required to pay one-fourth ($20 USD) of the monthly charge.

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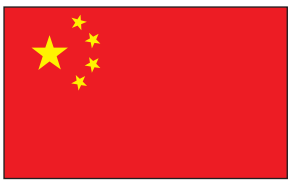
Destiny has found that South African residents with MSA plans spend about half as much on outpatient care and drugs as people in traditional plans, and it found no evidence that people who utilize MSAs skimp on primary care in a way that leads to higher inpatient costs (please see related White Paper on page 42). And, like Singapore, South Africa's per-capita health expenditures have decreased – from $315 (USD) in 1997 to $222 (USD) in 2001, a reduction of 30 percent.

Only 20 percent of residents have private insurance, which means MSAs are utilized by just 10 percent of the nation's population. Nonetheless, MSAs have had a greater impact on health care costs than a quick look would suggest. Even though 80 percent of South Africans rely on the government for their health care services, the public sector accounts for just 46 percent of total health care spending. Most of the money spent on health care – 54 percent – is spent by 20 percent of the nation's population, half of whom have MSAs. In addition, private hospitals and private wards in public hospitals are the fastest growing segments of the health care market.

China



Population: 1.2 billion

Square Miles: 3.7 million

China began experimenting with medical savings accounts in 1994, when it launched a pilot project in two cities with a combined population of 5 million people – Zhenjian and Jiujiang, both in Jiangsu Province. The pilot was expanded to include 50 cities in 1996 and all urban areas in 1999. The Chinese approach incorporates health savings accounts, out-of-pocket deductibles and catastrophic health insurance. Participation is mandatory for all industrial workers and government employees. Employees must contribute 1 percent of their salary to their own health savings accounts. Employers contribute 4 percent to each employee's individual health savings account and 6 percent to a Social Insurance Account (SIA), which pools funds from all subscribers to pay catastrophic claims.

Beneficiaries use their individual accounts to provide first-dollar coverage for their health care costs. When their fund is depleted, they must pay a deductible equal to 5 percent of their annual wages before the SIA can be tapped. Patients continue to pay coinsurance that declines as medical costs increase until they reach an out-of-pocket maximum based on their income. After that point, the SIA covers all expenses.

Evidence from the two pilot projects indicates MSAs did successfully contain costs – at least temporarily. Between

1994 and 1995, there was a 27 percent decrease in real health spending per beneficiary and a 25 percent decline in total health spending in Zhenjian. There was also a slight decrease in admission rates, while outpatient visits and the length of inpatient stays remained the same. Much of the cost savings came from reductions in the use of expensive diagnostic services and drugs. Under the Chinese approach, the cost of a medication is not covered at all if the drug is not registered on the Essential Drugs List. In addition, the Chinese approach includes a 20 percent coinsurance for all high-technology procedures, regardless of how much in medical costs a person has incurred. Between 1994 and 1995, the use of X-rays was cut in half, and the number of ultrasounds was reduced by 40 percent. There were also smaller reductions in the use of CT scans and MRIs.

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Finally, the Chinese also added supply-side payment controls for inpatient and outpatient services. Fixed payments were established based on the type of hospital providing the service. For example, in 1995, a tertiary hospital received $5.67 (USD) for an outpatient visit and $292 (USD) per inpatient day, regardless of the treatment provided or the illness of the patient. If the costs of treatment are lower than the fixed payment, the hospital gets to keep the difference. If the cost exceeds the fixed payment, the hospital is responsible for half of the additional cost up to 120 percent of the fixed payment rate.

The long-term effects of the Chinese approach are not known. It is difficult to find any data later than 1996. According to WHO, China's per capita health care expenditures increased 48 percent between 1997 and 2001 (from $33 to $49 USD), but the nation's vast size and rapidly expanding economy make it difficult to draw meaningful conclusions.

For more information, please see: "Medical Savings Accounts: Lessons from China" (Yip and Hsiao – 1997), "Medical Savings Accounts in South Africa" (Matisonn – 2000), "Medical Savings Accounts: The Singapore Experience" (Massaro and Wong – 1996), "Medical Savings Accounts: Lessons Learned from International Experience" (Hanvoravongchai – 2002) and "Medical Savings Accounts in Singapore: The Impact of Medisave Income on Health Care Expenditures" (Cheong – 2004).