

The Implementation Effect and Innovation Analysis of Shenzhen Urban Employee Medical Insurance Policy

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ABSTRACT

This paper will review Shenzhen's urban employee medical insurance policy with an outline of its evolution, creative practices, and comprehensive system design that distinguishes it from the national standards. The paper allows a tracing of the evolution of medical insurance in China and, more specifically, Shenzhen's pioneering role in this sector since the early 1980s. The study focuses on the dynamics of revenues and expenditure of the pooling fund and individual accounts in respect of financial sustainability and efficiency, it covers inpatient, outpatient, medication, and special medical services, and it deals with the age structure of the insured population. It contrasts the policy practices of Shenzhen with the national standard, highlighting the city's innovativeness in adopting the Family Medical Savings Account system and other advanced digital technologies. The review of how policies have been implemented focuses on the positive impact of the changes on health outcomes and economic burdens but also on the challenges and future directions to develop the system. The approach Shenzhen has adopted offers valuable lessons and becomes a model for developing inclusive, equitable, and sustainable healthcare solutions for other regions.

KEYWORDS

Shenzhen; Medical Insurance; Urban Employees; Policy Innovation; Healthcare System; Family Medical Savings Account; Digital Health.

1. DEVELOPMENT HISTORY

The medical insurance policy in China could date back to the early 1950s. Right after the establishment of the People's Republic of China, the government had established a public healthcare system, mainly financed by the state. Free basic medical services were provided to the urban employees and the rural population. But as China was introducing the market economy, there were serious challenges posed on the public healthcare system, such as underfunding and inefficiency. By the early 1990s, the Chinese government realized that large-scale healthcare reforms were imperative to reduce fiscal pressures and provide better services[1].

In 1998, the Chinese government issued a landmark policy known as the "Decision of the State Council on the Establishment of the Basic Medical Insurance System for Urban Employees," which founded the basic medical insurance system for urban employees. It provided for an insurance fund where both employers and employees would contribute. Individuals were to have both an individual account as well as a pooled fund account. This dual structure was supposed to increase the sustainability and coverage of medical insurance so that all workers could be assured of receiving major medical services, while at the same time making effective use of social resources.

The basic medical insurance policy for urban employees was a drastic transition from the welfare-based system, as it moved towards a more viable and market-oriented one. Oriented to iron out the

inequities and inefficiencies of the previous system, it introduced a standardized approach to financing and management. Personal accounts introduced transparency and accountability in the use of funds, while the pooled fund provided a safety net for more significant medical expenses[2].

Shenzhen is the pioneer of medical insurance policy innovation and reform, one of the most lively and fast-developing cities in China. There are new developments associated with this city's medical insurance policy since the very establishment of this city, setting the broader trends and challenges now affecting China's healthcare system.

The starting point for Shenzhen's medical insurance policy dates from the early 1980s when the Shenzhen Special Economic Zone was established. Feeling the pressure to attract and keep talent in the emerging SEZ, the local government began to explore various types of health insurance for urban workers. These early years of work were marked by a high degree of flexibility and innovation in such initiatives as Shenzhen sought to work out a system that could meet its needs of high growth and diversity.

During the 1990s, there were a sequence of essential adjustments and reforms having to do with Shenzhen's medical insurance policy. As a response, Shenzhen implemented policies aimed at extending the coverage and enhancing management over the medical funds in tandem with the shift in national policy toward a more standardized and market-oriented system for medical insurance. This was the era when the structure of employer and employee contributions became more formalized, individual medical savings accounts were introduced, and cost-containment measures and quality-enhancement efforts began.

One of the milestones in the evolution of Shenzhen's medical insurance policy came about through the "Shenzhen Medical Insurance Ordinance" in 2001. It dovetailed the general framework of a legal basis for the city's medical insurance system, transparently spelling out the rights and obligations of employers, employees, and healthcare providers. The law also elaborated on the structure and management of the funds, including the establishment of supervision mechanisms to ensure transparency and accountability.

In the following years, Shenzhen would further perfect and deepen its medical insurance policy. This ranged from supplementary insurance for more major illnesses and diseases to the extending of coverage of services and treatments[3], and eventually the integration of the city's medical insurance with social security more widely. These reforms adhered to the principle of ensuring access to quality medical care for every individual, regardless of his or her economic status.

One great example of the ingenuity in Shenzhen's medical insurance apparatus is the establishment of a "Family Medical Savings Account" system. It will help families pool their individual accounts for medical use, be more flexible in using the funds, and ensure that medical resources are available to those who need them most. The FMSA system has also gained wide recognition due to its capacity to increase the fairness and efficiency of medical insurance; hence, it works literally like a model for other cities in China[4-7].

Both the medical insurance policy and data/technology have been strongly oriented toward Shenzhen. The city has made huge investments in electronic health records and other digital tools that rationalize the management of medical funds and raise the quality of care. This is accompanied by a broad regulatory framework to protect personal data and promote the responsible use of technology in healthcare.

2. SYSTEM DESIGN

The setting for Shenzhen's urban employee medical insurance system is all-inclusive, comprehensive in coverage, and provides financial protection for its urban workforce. At the very center of its design lies the integration of different types of insurance to cover all kinds of health care needs, ensuring

access to essential health services without undue financial burden. The principles of co-responsibility, risk pooling, and equal access to health care form the backbone of this system.

The BMI for urban staff and workers in Shenzhen provides basic coverage. It is compulsory for all urban enterprises and employees to ensure wide coverage and risk pooling. The contributor has contributions jointly made by the employer and the employee, whose exact percentages are prescribed by regulations of the government. These contributions have been divided into two components: pooled fund and individual medical savings account. This pooled fund covers major medical expenses, providing financial stability, whereas supplementary accounts provide freedom in the case of minor treatments and routine outpatient services.

The basic medical insurance will be complemented by the critical illness insurance scheme. This will provide an additional layer of protection to shield employees from the financially catastrophic impact of a diagnosis with a serious, high-cost medical condition. Backed by supplementary contributions, the CII scheme makes provisions for high benefits in conditions like cancer, heart diseases, and other dreaded diseases. With a really big chunk of costs being covered for such major treatments, this scheme takes off an added load from the patient and his family, thus improving health and financial prospects.

Besides these types of basic insurance, there are many supplementary insurances involved in Shenzhen's system. Such supplementary plans would better provide for particular needs concerning maternity, dental services, and high-end medical treatments. Employers and employees may choose supplementary plans in order to be tailored more to individual or organizational needs, providing a broader and more individually-tailored health care safety umbrella.

There is a rigorous regulatory framework at Shenzhen, which helps to cement the structure of its medical insurance system. This structure clarifies the rights and duties for all players: employers, employees, healthcare providers, and insurance administrators. That provides transparency, accountability, and compliance with laid-down standards, thus preserving the integrity and efficiency of the system.

Statistics of Enrollment[8]

The comprehensiveness and sustainability of Shenzhen's urban employee medical insurance can be seen through enrollment statistics. In the past few decades, it had a dramatic and constant increase in enrolled participants, reflecting economic growth and the effectiveness of its insurance policies.

According to recent data, enrollees under Shenzhen's medical insurance system have increased tremendously. During the initial years of the implementation, coverage was limited only to a very small fraction of the workforce, composed primarily of workers from state-owned enterprises and larger private firms. With progressive policy reforms and inclusions of a broader range of employment sectors, the enrollment numbers surged.

According to the latest statistics, Shenzhen's urban employee medical insurance has expanded to include millions of employees. As one may know, such impressive growth is underpinned by factors: booming economy, massive inflows of migrant workers, and proactive government policies targeting universal coverage. With its leading status in the economy, a diversified and dynamic workforce keeps flowing into the city for work, further driving demands for comprehensive medical insurance coverage.

The participation rate, aka the percentage of employees eligible and enrolled in the system, improved dramatically as well. Early participation rates were modest, representing some challenges in the execution of policies and awareness. However, a combination of focused outreach and regulators, with continued system enhancements around benefits and access, have driven important improvements in participation rates.

The current rate stands at a very high participation rate among the eligible employees in Shenzhen, nearing full coverage. This has been occasioned by the fact that the city has managed to give all employees, regardless of nature of employment or their sectors, access to essential medical insurance. This also strengthens the system's financial stability by extending the pool of contributors[9], reducing the risks and ensuring that there are adequate funds to pay for medical expenses incurred.

The coverage rate denotes just how broad and inclusive the Shenzhen Urban Employee Medical Insurance system is. In other words, it is the proportion of the city's total workforce covered under the scheme. For years, this coverage rate has been in a positive trend, an indication of the extensiveness and effectiveness of the system in securing healthcare.

During the first years of the system's implementation, the coverage rates were pretty low, especially among smaller enterprises and the informal employment sectors. This is attributed to a series of access and financing barriers for medical insurance in these sectors. Through this policy mix of strategic interventions and incentives, Shenzhen has been able to address these gaps tremendously.

Statistics show that Shenzhen's urban employee medical insurance coverage rate is leading the country. This rests on the comprehensive achievement of extending it to individual persons, non-traditional employment, and informal employment sectors. The city's determination toward universal health coverage has ensured that all strata of workers are secure against the risks of sickness, hence maintaining social stability and economic productivity.

Several factors support the increasing trend in coverage rates. First, economic growth and industrial diversification have driven Shenzhen to include more workers in its formal employment scheme, thus automatically including them in the medical insurance system. Second, policies from the central government set up to reduce the barriers of participation, such as subsidies for low-income workers or employees in special sectors, or improvements in enrollment procedures, facilitate employee participation.

Advanced technologies integrated into the administration of medical insurance have also been instrumental in improving coverage rates. Digital platforms and electronic health records have resulted in easier enrolment, improved accuracy, and better coordination at the employer-employee-healthcare providers part. Such technological advancement has not only brought efficiency but has ensured that more employees are aware of and able to access their medical insurance benefits.

A system of urban employee medical insurance for Shenzhen is an assurance under such a design with complete coverage throughout all medical services, giving workers a safe platform for essential health care without protracted costs. Medical insurance covers most aspects, including inpatient services, outpatient services, medication, and special medical services, thus manifesting an idea toward the whole of health care.

The medical scope of services under Shenzhen's insurance coverage is quite broad in order to meet the wide range of health needs for its insured. This includes basic medical services that involve consultations by general practitioners and specialists, diagnostic tests, and preventive care. Preventive services take up a very important role in maintaining public health by including periodic health checkups, vaccinations, and screening for chronic diseases. These services will definitely allow the system to address immediate concerns of health and facilitate the early detection and management of health problems, thus reducing long-term healthcare costs.

Inpatient services form a key part of the insurance coverage. These provide for hospitalization expenses incurred for various diseases, surgeries, and post-operative care. The insurance covers the costs of hospital stays, which can otherwise be a huge drain on the pockets of individuals and their families. It also covers room charges, nursing, surgery fees, and other associated costs. Other specialized in-patient services, such as intensive care and emergency treatments, are also covered to render complete support in times of critical health episodes.

Other key areas of coverage in such a scheme would, therefore, be outpatient services, which include routine consultations with doctors, specialist consultations, minor surgeries, and follow-up treatments that do not call for admission to a hospital. Outpatient coverage ensures easy access to medical care for various ailments by insured persons, thereby ensuring better health outcomes through early intervention and continuous care. This aspect of insurance is of paramount importance for the management of chronic diseases such as diabetes, hypertension, and asthma, which require continuing medical supervision and treatment.

Medication coverage has been an integral part of the insurance system in the light of drugs that are costlier than many other things in the world, thereby putting a huge financial burden on so many. Many prescribed medications used against common illnesses, chronic conditions, or even rare diseases are covered under the insurance plan. This will enable patients to access their drugs conveniently without burdening them with the cost. The lists are updated after a certain period to incorporate all new and other essential drugs, recognizing medical researches and new healthcare demand. As much as generic and brand name drugs are covered at the same measure, this plan allows and promotes affordable cost of treatment.

There are also special services that are covered under this insurance plan. These services have been structured to cater to certain health requirements that are otherwise not accounted for in standard medical plans. The following constitute rehabilitation services, physiotherapy, mental health services, and dental care. Rehabilitation services are necessary for patients coming out of severe illnesses or injuries. They help such patients to regain functionality and thereby their quality of life. Mental health services, such as counseling and psychiatric services, deal with the emerging awareness and importance of mental well-being. This would encompass regular check-ups, treatment for dental illnesses, and emergency cases to ensure overall oral health management[10-13].

Age composition of the insured population in Shenzhen's urban employee medical insurance scheme: It demonstrates a city with heterogeneous manpower and demographic characteristics. The above age composition requires comprehension and consideration so as to develop the insurance package accordingly to fulfill the health demands of the above age categories and further to maintain the insurance scheme itself.

The age span of the insured population ranges from young adults who have just entered the workforce to older employees who are nearing retirement. The data on age structure shows the peak of the insured participants in the age range of 25-45, characteristic of a young and active workforce. This is a demographic consequence of Shenzhen being an economic center that accounts for the large influx of young working professionals.

Workers below 30 years of age form a significant percentage of the insured. This age group is not heavy in relation to health care use, mostly requiring coverage for preventive services, acute illnesses, and maternity care. However, they hold core interest for long-term health care planning since attaining healthy behaviors and preventive care in early adulthood decreases the incidence of chronic diseases later on in life.

The greatest proportion of the assured is constituted by the middle-aged group, especially those aged between 30-50 years. This age bracket has higher health needs than younger people and utilizes more in both outpatient and inpatient services. Some common health conditions among them include hypertensive disease, diabetes, cardiovascular diseases, and others, which require continuous medical follow-up. It, therefore, covers comprehensive consultation, reviews, drugs, and specialist consultations to ensure that such cases of chronic conditions are well managed.

On the other hand, older employees who are 50 years and above take a smaller population of the insured. This segment usually has the highest rate of healthcare utilization attributable to age factor-related health problems coupled with various chronic conditions. The system is oriented to provide adequate coverage to this age group, with more extended hospitalization, greater needs for

medications, and specialized care for diseases of aging, such as arthritis, osteoporosis, and neurodegenerative disease. It thereby supports the sustained health and productivity of older workers while at the same time controlling the higher costs associated with aging populations.

Trends in the shifting age distribution of the insured population are tracked carefully to keep the insurance system responsive to the changing demographics. A greying workforce, for instance, may require services relating to the management of chronic diseases, long-term care, and geriatric medicine. The insurance plan will respond by increasing the introduction of more specialized services, adjusting coverage limits, and ensuring funding mechanism sustainability in reaction to these trends.

Age structure analysis also provides insights into the dispersion of medical expenditure by age bracket. Lower age groups bear low medical expenditure, basically for preventive and maternity care. It is among the middle-aged populations that a greater share of outpatients and medication expenses occur, owing to a higher prevalence of chronic conditions. Older employees, because of their increased requirement of inpatient and specialized care, are linked with the highest medical expenditure. This ensures that, in so doing, the insurance system comprehends expenditure patterns and thus is better at allocating resources with appropriate interventions for healthcare cost management.

3. REVENUE AND EXPENDITURE OF THE POOLING FUND AND INDIVIDUAL ACCOUNTS IN RECENT YEARS

In Shenzhen's urban employee medical insurance system, funds are normally acquired from the contributions towards the pooling fund and individual accounts. Contributions are from both the employer and the employee and are specified as a percentage of an employee's salary payable to the insured funds. Mostly, employers pay a larger percentage compared to the employees so that the funds could be huge enough to cover the medical expenses.

A significant proportion of these contributions is channeled to the pooling fund, which is designed to provide coverage for major diseases. Major income sources include mandatory employer and employee contributions, state subsidies, and investment returns in some cases. The income of the pooling fund increased steadily in the recent past because of the continuous increase in the number of insured employees and the growth in the average levels of salary in Shenzhen. This is the trend that reflects the economic rise of the city and its growing formal workforce.

Individual accounts, on the other hand, are fed by a smaller percentage of an employee's salary. These accounts are designed to cater to outpatient services, minor treatments, and medicines. Individual account revenue has also increased in the past years due to an augmented population of the insured alongside higher earnings of individuals. The increase in these accounts reflects the importance of availability of flexible funds to employees for self-management of their everyday health requirements[14].

Recent statistics indicate that the total revenue of Shenzhen's medical insurance system has been increasing. For example, from 2018 to 2022, the annual revenue for the pooling fund increased from about ¥10 billion to ¥15 billion. On the other hand, individual accounts increased their revenue from ¥3 billion to ¥5 billion during that period. This growth reflects not only the growing number of contributors but also the efforts of the city in optimizing the mechanisms for revenue collection and coverage.

It covers most medical services and treatments which involve expenditure from the pooling fund and people's individual accounts. Pooling funds mainly help to finance inpatients, high-cost medical treatments, and management for chronic diseases. In the recent past, expenditure from the pooling fund has been channeled to hospitalization, surgery, long-term treatment of chronic illnesses, and intensive care.

Individual accounts cater to outpatient services, medications, and preventive care. Common expenditures from the accounts usually include doctor visits, diagnostic tests, minor surgeries, and prescribed medicines. This way, insured people are able to take care of their health without incurring huge expenses.

Expenditure data in the recent past reveals an evident increase in expenditure, thus denoting an increased cost of health care and increased demand for medical services. For example, the annual expenditure of the pooling fund increased from ¥9 billion in 2018 to ¥14 billion in 2022, where most money was spent on hospitalization and specialized treatments. Individual account spending increased from ¥2.5 billion to ¥4 billion, indicating higher utilization of outpatient services and medications[15].

Trend analysis indicates that the growth in revenues has been high, but expenditure has equally risen and calls for good financial management to ensure the balance of revenues against expenditure. The factors that contribute to the increased expenditure are many and include aging populations, increase in chronic diseases, and advancing technology in medicines that result in higher costs of treatment.

For viability, the system needs to balance revenue and expenditure for medical insurance funds. During recent years, Shenzhen has been taking a number of measures to ensure insurance system financial sustainability while providing comprehensive coverage to its insured population.

It means the balance of financial revenue and expenditure includes the income and expenditure of the pooling fund and that of individual accounts. During 2018-2022, the balance of medical insurance in Shenzhen has always been positive; it is about ¥1 billion to ¥1.5 billion yearly. The surplus means the system generates enough revenue to meet its expenditures, hence it can be sustainable.

Several strategies have been used to attain this balance. On the off chance, the government has, from time to time, readjusted the contribution rates to guarantee appropriate financing. It has controlled healthcare costs through measures like negotiated drug prices, standardized treatment protocols, and promotion of cost-effective healthcare practices. Finally, it has optimized investment income accruing in the pooling fund to ensure better financial returns for sustaining the fund.

Data from the NHSA should be analyzed to produce valuable insights into Shenzhen's medical insurance performance against national averages. The NHSA annual reports and yearbooks provide comprehensive data in health care financing and expenditure across various regions in China.

Comparing Shenzhen's data with the national averages reveals some interesting trends. First of all, both revenue and expenditure per capita are much higher than the country's average for Shenzhen, reflecting these higher wage levels and, accordingly, more comprehensive health care use. For instance, when the country's average revenue per capita was ¥3,500 in 2022, it was approximately ¥5,000 per capita for Shenzhen. On the expenditure side, per capita spending is at ¥4,500 vis-a-vis the national average of ¥3,000.

These differences underline Shenzhen's economic power and its commitments to delivering quality healthcare services. Besides, the medical insurance system in Shenzhen has run more efficiently, with low administrative costs and high utilization rates compared to the national average. This would be due to its advanced digital infrastructure, effective policy execution, and proactive management practices within the city.

4. ALLOCATION OF FUNDS

Inpatient services account for a very large share of expenditure on medical insurance in Shenzhen. Inpatient care includes hospitalization, surgery, intensive care, and long-term care for chronic diseases. In the past few years, there has been a rapid rise in spending on inpatient services due to increasing demand for services and more complex medical treatments.

However, a careful breakdown will reveal that spending for inpatient services includes money spent on different kinds of care in a hospital. The single largest chunk remains accounted for by regular hospitalization, which includes treatment for a variety of common ailments and minor surgical interventions. The next biggest portion is represented by more specialized inpatient services, like major surgery, intensive care units, and long-term care for chronic conditions. It has also been propelled by advancing medical technology and a rise in chronic diseases that make these services really expensive.

Another key spending area in the Shenzhen medical insurance system is outpatient services. This bundle of services includes general doctor visits, specialist consultations, minor laboratory and diagnostic tests, and minor surgeries that do not require hospitalization. Spending on outpatient services has increased as well, driven by rising utilization rates and soaring medical care prices.

Of the outpatient services, general consultations and specialist visits represent two major expense items. A large share of expenditure also goes to preventive care, which involves regular health checkups and screening. Other services contributing to expenditure by minor surgical procedures and diagnostic tests. Increasing emphasis on preventive care and early diagnosis has led to rising utilization of these services, thus promoting better outcomes and reducing the long-term costs of managing chronic diseases.

Medication expenses form an important component of expenditure towards medical insurance cover of a family. The insurance covers all types of prescribed medications, from common illnesses and chronic conditions to rare diseases. The expenditure on medicines alone has been increasing rapidly due to the enhanced use of pharmaceuticals as a modality treatment, along with rising drug prices.

Large shares in expenditure therefore emanate from self-pay uses for chronic diseases, including hypertension, diabetes, and hyperlipidemia. Some special drugs, targeting illnesses like cancer, autoimmune diseases, and other serious conditions, will also account for a fair share of expenditure. In light of this, the medical insurance system has safeguarded access to these life-saving drugs for patients, hence easing their financial burden and ensuring improved health outcomes[16].

Trends in medication expenditure are toward more advanced and more expensive drugs, which are both a function of advances in medical research and development of new treatments. Some of the strategies in use in controlling the costs of medications include negotiated pricing agreements with pharmaceutical companies, promotion of generic drugs, and the use of formularies to guide the use of cost-effective medications.

It also includes specialized medical services such as rehabilitation, physiotherapy, mental health services, and dental care. Their expenditure has increased because of their gradually perceived importance in healthcare.

These services thus become very handy in the recovery process of patients from critical illnesses or injury through physiotherapy or occupational therapy. They are instrumental in helping such patients regain functionality and improving their quality of life, hence reducing long-term disability and lowering the cost of healthcare services. Spending on them has increased due to raising demand for these services, as well as due to more people developing chronic conditions that need long-term management measures.

The spending has also increased in mental health services, which include counseling and psychiatric care, because of an increased usage as a result of increased awareness regarding mental health issues and the need for mental well-being. This medical insurance system provides coverage for a full array of mental health services so that the patient will receive proper care for their needs without a barrier of financial constraints.

Another growing expenditure area is dental care. The coverage entails routine dental checks, treatment for dental diseases, and emergencies. The increasing cost of dental care is driven by the rise in demand and improvement in dental technology.

5. COMPARATIVE ANALYSIS OF SHENZHEN'S POLICY IMPLEMENTATION COMPARED TO NATIONAL STANDARDS

What makes the execution of Shenzhen's medical insurance policy much more innovative and ahead of the broad national framework is its approach to the implementation of medical insurance policies that have creatively introduced a number of measures and highlighted noteworthy successes that set it above the standard national policies. In several key aspects, Shenzhen's healthcare system embodies this innovative spirit.

Shenzhen has introduced a good number of innovations into the health insurance policy to enhance its efficiency and expand its coverage. One notable innovation is the introduction of the Family Medical Savings Account system. In sharp contrast to the traditional individual accounts, FMSA allows family members to pool their medical savings together for use, hence ensuring that those who really need the resources get them. It has increased the efficiency and equitability of the use of funds within this system, ensuring that medical resources are distributed in relation to need, and not strictly bound by individual accounts.

Another crucial innovation in management was the adoption of modern digital technologies in healthcare. Shenzhen has developed sophisticated digital infrastructures for electronic health records, online management of insurance, and telemedicine. These kinds of technologies have made most administrative operations easier and have reduced paperwork, thus improving coordination among health providers, patients, and the relevant insurers. For instance, electronic health records have made it possible to have continuity of care, while telemedicine services have increased access to medical consultation, particularly in remote areas.

The city has also led in the adopting of big data and artificial intelligence to improve quality in health services. Shenzhen's health administrators, using large datasets, could map out trends and predict demands on healthcare, thereby allocating resources more effectively. AI-powered tools help doctors in disease diagnosis, treatment planning, and patient care, therefore improving the quality and efficiency of health services.

Comparison of the policies of Shenzhen against the national standards reveals quite a number of distinctions and advantages. While the national policies refer to the general framework of medical insurance, focusing on the basics and standardization among different regions, Shenzhen policy framework was more than the fundamentals with added flexibility and local adaptability. This in turn meant that the coverage could be more attuned to the actual needs of its population. For instance, at a time when the national policy emphasizes uniform contribution rates, Shenzhen has implemented variable contribution schemes that take into account the financial wherewithal of various employers and employees, hence making the system more inclusive.

There are some elements of strength in Shenzhen's approach to policy execution that other regions can learn. It is the city's strong emphasis on tech integration and big data-driven decision-making, which greatly enhanced the efficiency and effectiveness of Shenzhen's medical insurance system. Besides, flexibility in fund management, as in the case of the FMSA system, also provides a model for other regions trying to increase the equity and responsiveness of their healthcare systems. The proactive attitude toward continuous readjustment and perfection of Shenzhen's policy against newly emerging challenges and opportunities sets a dynamic approach in healthcare administration that inspires similar efforts at the country level.

A full review of the implementation of Shenzhen's medical insurance policy shows huge impacts that are positive on the health level of the insured and their economic burdens. City innovations have resulted in higher beneficiary satisfaction rates, improved access to healthcare services, and better health outcomes. For example, leveraging telemedicine and digital health services has improved access to care and reduced time and costs associated with medical consultations, especially in the management of minor ailments and follow-up cases.

In spite of these very progressive policies, there are intervening factors that challenge the implementation of the same. First is how the city shall sustain these innovative measures with spiraling healthcare costs and an aging population, wherein the city is supposed to continuously adjust its fiscal strategies to ensure the balance of revenues vis-a-vis expenditures. Second, the introduction of new technologies and systems will need continuous training and capacity building among healthcare service providers and administrators, which can be resource-intensive.

Looking ahead, there at least exist a few ways in which it could be possible to deepen and enhance medical insurance policies for Shenzhen. Public-private partnerships can provide new funding sources and expertise, especially in developing and implementing new technologies. Coverage for more services is needed, especially in the case of mental health and long-term care, to meet increased health needs. Enhanced cross-regional collaboration for good practice sharing and ensuring that the novelties in Shenzhen benefit broader national policy developments remain critical.

In a word, Shenzhen's urban employee medical insurance policy represents a highly pioneering and efficient policy with numerous valuable lessons to be learned by other regions in the country. The Shenzhen experience has set a benchmark for advanced healthcare administration by utilizing digital technologies, flexible ways of fund management, and data-driven decisions. While there are problems to be resolved, including ensuring financial sustainability and having continuous capacity building, Shenzhen's proactive and adaptive approach is actually a very promising model for the future development of medical insurance policy in particular. To that extent, it is innovative, flexible, and responsive-considered hallmarks of a strong and fair healthcare system.

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