

# Research on the Characteristics and Problems of Several Medical Insurance Payment Methods in China

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Abstract: Deepening the reform of medical insurance payment methods, improving the efficiency of using medical insurance funds, and safeguarding the rights and interests of doctors, insurance, and patients are the top priorities of medical insurance reform. At present, China's medical insurance fund is imbalanced in revenue and expenditure, medical expenses are growing too fast, and medical quality is difficult to guarantee. Therefore, China attempts to leverage the payment method of medical insurance to protect the rights and interests of three parties. This article summarizes the characteristics of mainstream medical insurance payment methods in China (such as project based payment, head based payment, service unit based payment, and disease based payment) and proposes suggestions to solve the current difficulties of medical insurance payment methods, providing a theoretical basis for promoting diversified and composite medical insurance payment methods.

Keywords: Medical Insurance Payment Method; Medical Insurance Reform; Medical Insurance

# Introduction

At present, European countries mainly adopt a payment method based on head and project for outpatient services, while a mixed payment method is used for inpatient services, which is mainly paid by the Diagnosis Related Group (DRG) and supplemented by service units such as bed days.

China's 14th Five Year Plan for National Economic and Social Development of the People's Republic of China and the Outline of Long Range Objectives for 2035 (Draft) also explicitly requires the implementation of a diversified and composite medical insurance payment method based on disease type payment. This article summarizes the characteristics and practical application of several major payment methods in China, analyzes the advantages and disadvantages in the application process, and proposes countermeasures to address these shortcomings, providing reference for policy makers.

## 1. Characteristics and Problems of Different Payment Methods

#### 1.1 Pay per project

Project based payment is the main method of medical insurance payment in China. The examination, treatment, hospitalization, surgery, and medication expenses incurred by patients during hospitalization are reimbursed according to the medical insurance reimbursement catalog and proportion, and the remaining expenses are borne by the individual, which is a typical post payment system. Features: Wide application range, flexible and simple payment, high enthusiasm of medical personnel, and rapid development of new technologies. Problem:

① Medical expenses are growing rapidly. Medical institutions blindly introduce high-end equipment, use expensive drugs, or increase hospitalization hours to increase efficiency, which not only increases the burden on patients but also makes it difficult to utilize grassroots medical resources The difficulty of medical insurance supervision is high.

## 1.2 Pay per head

Medical institutions implement a head responsibility system based on the medical service projects they undertake, while medical insurance institutions pay fixed fees based on the number of signatories and the standard cost of head, which belongs to the total prepayment system. Features: Simple and easy to implement, facilitating settlement between medical insurance institutions and medical institutions, reducing workload; It is beneficial to cost control and avoid inducing demand, especially for chronic multiple diseases, such as Zhu Minglai,

who confirmed that diabetes patients are paid per capita, and their total hospitalization expenses and self payment amount are decreasing; It is beneficial for the prevention and control of frequently occurring and common diseases. Problem: ① Risk transfer. The cost risk of medical institutions increases, and in order to avoid risks, they use drugs outside of the medical insurance catalog or transfer patients to outpatient clinics and out of hospital rehabilitation, thereby increasing medical income and increasing the burden on patients Cost risk is difficult to crack. Collaborating and actively implementing graded diagnosis and treatment among medical institutions at all levels can avoid the situation of a single medical institution fighting alone. However, hospitals and communities in our country are in a fragmented and fragmented service state, and the implementation of the graded diagnosis and treatment system is not comprehensive. At the same time, the binding relationship between signatories and medical institutions makes it difficult for patients to achieve transfer and choose specialized hospitals for treatment Medical quality is difficult to guarantee. Medical institutions shift towards disease prevention and health promotion in order to control costs, but limited medical costs can easily lead to inadequate treatment. For patients with acute, critical, and rare diseases, medical institutions are prone to shifting blame on patients. In addition, the competitive behavior in the medical market has led hospitals to a vicious cycle of lack of funds, outdated technology, and declining medical quality. The author believes that paying per head is beneficial for the prevention and control of chronic and common diseases, and is easy to promote in communities and grassroots medical institutions. However, in terms of the current medical situation in China, there is no practical basis for in-depth development.

#### 1.3 Pay per service unit

Service unit payment is divided into the same service units based on a certain characteristic, such as outpatient visits, inpatient visits, and inpatient bed days. Medical insurance institutions pay fees to medical institutions based on the average cost of each service unit. Under the same payment standard, the daily hospitalization or outpatient expenses are paid the same and fixed. Features: It is beneficial for shortening hospitalization days and reducing treatment costs; The operation method is simple, convenient for medical insurance settlement, and also conducive to active innovation by medical institutions; This payment method is more scientific than paying per head.

# 1.4 Pay by disease type

Paying by disease is a prepaid method that comprehensively balances the patient's main diagnosis, surgery, age, and presence or absence of comorbidities to determine the length of stay and medical expenses for each disease. Its prepaid mechanism also stimulates changes in the treatment and management of medical institutions.

#### 1.4.1 Single disease payment

Single disease payment is classified through disease diagnosis, and each disease has a corresponding fixed reimbursement standard. Medical insurance institutions allocate certain fees to medical institutions in advance based on this standard and the number of medical visits, in order to achieve cost control purposes. Characteristics: Determine payment standards based on the disease type, promote medical institutions to actively control fees, and reduce medical expenses and per capita expenses; Encourage hospitals to improve service efficiency.

#### 1.4.2 DRG Payment

DRG divides hospitalized patients into certain disease groups based on clinical similarity and resource consumption. It mainly divides patients into 618 disease groups based on clinical characteristics such as age, gender, length of stay, clinical diagnosis, and disease severity. Medical insurance institutions provide corresponding compensation to hospitals in advance based on the first diagnosis and ICD code. Characteristics: Eliminate the use of drugs to support medicine, suppress induced demand, reduce medical costs, improve the quality of medical services, and focus on the technical labor value of medical personnel.

#### 1.4.3 DIP point payment

DIP, collectively known as payment based on disease classification based on big data, is a unique prepaid medical insurance payment method in China. It utilizes the advantages of big data to determine patients' entry into corresponding groups based on factors such as age, gender, disease diagnosis, treatment methods, and length of stay, according to the top 6 ICD codes and the first clinical diagnosis. Finally, 14052 disease groups are formed, and combined with the average resource consumption, medical insurance payment ratio, and medical be-

havior characteristics of various disease types in the region, payment standards are formed based on disease type combinations. The cumulative score is larger, The higher the medical insurance payment amount, the final monthly prepayment and annual settlement will be made. Medical institutions at the same level within the same region have the same weight, supervise and constrain each other, and form healthy competition, which is easy to improve medical quality, diagnosis and treatment technology, and control medical expenses. Characteristics: DIP is beneficial for controlling medical expenses, reducing the proportion of patients' self payment, and slowing down the growth rate of medical insurance fund expenditure.

# 2. Countermeasures to solve the dilemma of medical insurance payment methods

#### 2.1 Promote diversified payment methods and improve the utilization of medical resources

China can recommend one method based on the differences in economic levels among different regions, with other methods as supplements. For regions with a good economic foundation and sufficient technology and talent, DIP payment can be explored; Exploring per capita payment in areas with weak conditions; Targeted payment methods can also be adopted based on local disease conditions, such as in areas with high incidence of chronic diseases, head payment or service unit payment can be adopted; For patients with critical, severe, and rare diseases, a project based payment method can be appropriately increased to avoid returning to poverty due to illness or causing poverty due to illness.

#### 2.2 Improve payment standards to ensure scientific and reasonable payment

The formulation of payment standards is mostly based on historical expenses, and medical insurance departments need to fully utilize big data information. In addition to considering medical costs, they should also pay attention to factors such as changes in disease spectra, price increases, salary composition of medical personnel, hospital hierarchy, and medical technology in various regions. The medical insurance department needs to strengthen cooperation with other relevant departments, ensure information connectivity, adjust payment standards in a timely manner according to market conditions, and avoid the use of one payment standard for many years, resulting in a mismatch between price levels and people's health needs.

## 2.3 Improve supporting facilities and promote the implementation of payment methods

The implementation of medical insurance payment methods requires supporting software and hardware. Relevant medical insurance settlement personnel need to be familiar with the technical guidelines of medical insurance payment methods, familiar with charging standards and directories, and ensure the completeness and accuracy of medical record information; In addition, make full use of internet big data to provide early warning for high-risk insurance fraud. This requires funding and relevant professional technical personnel to ensure the implementation and long-term operation of the system. Especially the current value based payment reform promoted by the country not only requires relevant basic equipment, but also a sound information system and professional talents, with high promotion requirements.

#### 3. Summary

In summary, various payment methods target different directions and each has its own advantages and disadvantages. If per capita payment drives medical institutions to shift towards preventive healthcare, DIP score payment promotes proactive change in medical institutions. In China, different payment types can be selected based on targeted applications such as medical services, preventive healthcare, and practical conditions. For common and frequently occurring diseases that are easily grouped, payment by disease can be adopted; For complex diseases with high treatment costs, project-based payment can be used to help patients share medical expenses; For the prevention and treatment of chronic diseases, one can choose to pay per head. For underdeveloped areas, a combination of payment based on head count, project based payment, and total budget system can be adopted for payment; In developed regions, DIP value based payment can be vigorously promoted, combined with other payment methods. In short, in order to change the current situation of imbalanced medical insurance revenue and ex-

penditure, difficulty in ensuring medical quality, and rapid growth of medical expenses, it is necessary to change the previous single payment method from single to diversified development, from treatment to prevention as the main focus, explore multiple and composite payment models, learn from or supplement each other, achieve large-scale promotion and application, minimize patient medical costs, and improve medical service efficiency, Promote the healthy development of residents' lives.

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