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*ANALYSIS AND POLICY SUGGESTIONS FOR THE DEVELOPMENT OF CASE PAYMENT
SYSTEM IN HEILONGJIANG PROVINCE*

*BY Grayson Clarke
Financial Management Specialist
and
Hubert Stueker
Medical Insurance Specialist*



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The field visit to Heilongjiang province contributes to the completion of the DRG and case payment situational analysis in China by the EUCSS project team and seeks to assess the state of play in the use of case payment methodology regard to cost containment used in urban medical insurance

The objective of the visit was to identify the current implementation of case payment in Heilongjiang Province, any preconditions for full DRG development taking into account DRG arrangements in selected EU member states such as the UK and Germany and to prepare policy options for DRG implementation within China.

The project team would like to thank the PLSSB and the LSSB's Mudanjiang and Qiqihar for the excellent organization of the field visit, and also the Secretary General Mr. Xiong Yiangyun of the China Health Insurance Research Association who assisted the team in the analysis of the case payment method in Heilongjiang province.

The Medical Insurance Bureaus in Mudanjiang and Qiqihar represented by Director Pan Li and Director Liu Zhong provided very useful information about the diagnosis case based payment system. The team considered their work as very useful in developing a step by step or incremental implementation towards a DRG prospective payment mechanism. Both bureaus are doing a very professional job in the field of cost containment based on the current medical insurance and health care regulations.

We would like to recommend that both LSSBs receive approval from MoHRSS to participate in the DRG payment mechanism project and that the provincial as well the local government support their participation.

The provincial GDP for 2005 was 551 billion Yuan, up 11.6% from the previous year. The per capita GDP stood at 14.430 Yuan (US\$ 1.762). The GDP ratio of the primary industry yielded a value added of 67.25 billion Yuan, 9.2% more than that of the

previous year; the secondary industry, 297.08 billion Yuan, a growth of 12.6%; and the tertiary industry, 186.67 billion Yuan, a growth of 10.7%.

Provincial revenues were 39.26 billion Yuan, an increase of 18.6% over the previous year 2004. Provincial expenditures were 86.14 billion Yuan, an increase of 16.1%. The consumer price index was up 1.2% from the year 2004.

At the end of the year 2005, the total population stood at 38.20 million and the employed population stood at 17.497 million. The registered urban unemployment rate was 4.42%. The disposable income of urban residents was 8.273 Yuan per capita, up by 10.7% from 2004. Rural resident's per capita net income was 3.221 Yuan, a growth of 7.2% from the previous year.

In the public health sector were a total of 8.320 medical and health care institutions equipped with 120.000 beds and staffed with 149.000 medical professionals and technicians at the end of 2005. The centres for diseases control and prevention numbered 198, staffed with 7.000 professionals and technicians. 14 counties (cities) began to pilot the new rural cooperative medical service which had covered a total population of 3.325 million at the end of 2005.

At the end of 2005, insurance plans for endowments, unemployment and medical treatment covered a population of 7.694 million, 4.596 million and 6.028 million respectively.

Similarities

- i. General

Mudanjiang Municipality piloted the Medical Insurance Urban Employees and Retirees in the year 1996 initiated by the Ministry of Health and the responsibility changed in 1999 to the Labour and Social Security Bureau. In the year 2002 the LSSB established the Department of Medical, Work Injury, and Maternity Insurance (hereafter referred to as UMI – Urban Medical Insurance). The municipality Qiqihar established the same department within the LSSB. The Medical Insurance Urban Employees and Retirees in Mudanjiang currently cover around 270.000 in their catchments area including all employees of government offices, enterprises and self-employed population. The new scheme on urban residents will be implemented in June 2008. The Department of Medical Insurance of Qiqihar covers 820.000 under the BMI urban employees, 520.000 under the SMI and 210.000 under the BMI urban dwellers, which has already been implemented from January 2008.

Annex 1 Facts at a Glance gives some basic information about the different municipalities.

1. Contribution Rates & Contributions to the Individual Account (IA)

The municipal LSSB of Mudanjiang currently sets contribution rates of 2% for employees and 7% for employers under the central regulation GUOFA No. 44 and the premiums are collected by the Dept of UMI. However contribution rates differ in Qiqihar - 2% Employees and 5% Employees - which do not correspond to the GUOFA No. 44.

The situation is worse at county level medical insurance bureaus in Qiqihar where in some counties there is no IA at all and the effective employer collection rate, particularly from loss-making State Owned enterprises(SOEs) is often only 2% to 3%. The unclear situation of the SOE's creates problems in terms of the sustainability of the county level medical insurance funds and the entitlement of the population. All employees are excluded from the medical insurance benefit if the company does not pay the contribution collection.

Both Mudanjiang and Qiqihar make additional contributions from the employers contribution to the IA. In Mudanjiang the insured aged above 46 receive 4% and those below 46 receive 3% of the total contribution. In Qiqihar the allocation is smaller at 2.3% for those under the age of 40, 2.4% for those over 40 and 2.5% for the retired. . Employees with low income working for example in companies with deficit or companies in liquidation did not have individual accounts and this applies for around 2% of the companies and around 5% of the employees.

The team queried the value of the IA where the basic social pool is not really large enough to adequately support basic risks. The annual allocation to the IA in Mudanjiang was 72% of social pool expenditure, and individual account surpluses represented a significant portion both of accumulated reserves and annual

expenditure. The team that consideration should be give at least as a first step to remitting only the employee contribution to the IA.

2. Contribution Collection Arrangements

In theory the calculation basis in both municipalities is based on last year's gross salary but the need to keep as many enterprises as possible within the system has led to ad hoc assessment methods based on ability to pay. This has led to inequity of treatment between employers and employees within the catchments area of Mudanjiang and Qiqihar. However, the international expert team understands the need for some flexibility which allows for the participation of financially distressed companies and their employees. However the central and as well the provincial government should consider a standardized calculation guideline for the contribution collection arrangements.

3. Pooling Level

The pooling levels of both Mudanjiang and Qiqihar are divided between the municipality and the counties. Mudanjiang is divided into 7 pooling areas (1Municipality and 6 County) and Qiqihar 10 pooling areas (1 municipality and 9 Counties). The provincial labour and social security bureau of Heilongjiang province is responsible for the county level medical insurance but the municipalities are responsible for the implementation of the scheme and the guidelines.

4. Lack of Relationship of Administrative cost to Workload

The Department of UMI in Mudanjiang city runs their activities with 25 persons responsible for the account settlement and 8 persons for contribution collection. 50% of the personal are medical professionals. However, there is no direct relationship between the expansion of insurance coverage revenues and expenditures because the cost of personnel and general administration has to be paid by the local government separately from limited budget revenues. Furthermore there are no workload indicators to calculate required staffing numbers, and as a result while the numbers involved in medical insurance administration had increased in the last 5 years by about one third, this had not kept pace with the expansion of basic medical insurance.

The reliance on local administrative budgets has also curbed much needed IT development. Observations made by the expert team showed that the system for calling up case data and invoices was very slow. Discussions with the IT Department

revealed that their IT network relied on two servers provided by the Bank of China in 2001 which were in need of replacement.

ii. Case Payment Model

1. Cash limit overlay on fee for service structure

Mudanjiang and Qiqihar reimburse the invoices of the hospitals according to the so called “Three Lists” and the local price calculation made by the municipal pricing department. Both cities use the respective diagnosis coding ICD 10 and all services cost have to be allocated to the diagnosis.

In the mid 1990s, a medical expert team of the province developed a list of common diseases which forms the basis for a “Cash limit overlay on fee for service structure”. The team elaborated a type of case based payment guideline for the medical insurance and the provider which could be described as a diagnosis based ceiling line for hospitals. In order to set up a proper calculation the experts’ team based in Mudanjiang requested around 50 cases on common diseases each from the hospitals; the average length of stay; services plus the prices; discharge results and based on this database the expert team calculated the diagnosis related cash limit overlay on the service fees. All the cases have been revised several times according to real results during implementation.. Both cities mentioned a reduction in the length of stay. However, the method is a kind of cost containment which works well for the medical insurance but the patient may still have to cover the over prescription and over usage of fee related to lab-tests or services generated by the hospitals (provider driven demand).

Beside the diagnosis related payments the medical insurance introduced a number of administrative measures to control cost and maintain quality. These included in Mudanjiang allocating the case of the basis of the initial diagnosis, and in both cities to prevention of repeat payments for the same case within 15 days. In terms of quality to prevent cost-cutting, a rule was in place to pay on actual costs if the actual cost was less than 7 or 80% of the case payment standard. A further administrative rule involves an element of payment by results. The hospital gets 100% of the case based service fees if the patient is fully cured, 90% if the patient is treated but ill and 80% if the patient dies in hospital.

While there is a need to recognize quality in any case payment system and to ‘reduce game playing’ the value of these rules is questionable. For example in the case of actual expenditure rule, the medical insurance bureau admitted there were very few invoices that came in below the required actual rate necessary to produce a full case payment. In the case of the payment by result rule outcomes are difficult to

monitor (how do you classify the not 'fully cured'?)¹ and the rule in any case provides a perverse incentive. Sometimes the most expensive treatment is and should be provided to those patients whose lives you are trying to save, Therefore it is recommended that there needs to be other methods most notably medical and clinical practice audit to promote quality and this may need to be translated into a positive financial incentive (eg by providing an annual performance related uplift on all tariff income) rather than a negative one. .

2. Special Price

The current rudimentary payment method used by Mudanjiang and Qiqihar leads the hospitals and the medical insurance to negotiate prices for particularly expensive cases where use of the fixed price could generate very substantial losses for the hospital. These specific cases are usually those where there are complications and/or co-diagnosis with the initial case as well for catastrophic diseases. Hospitals have to explain the reason and the cause for higher expenses on each case and submit the clarification to the medical insurance. The medical insurance in Qiqihar decides on a case by case basis the additional payments which starts at 70% and but could cover 100% in terms of catastrophic diseases minus the deductibles/ceiling. Mudanjiang medical insurance defines the specific treatments in a bit different way like for the dialysis they cover 70% and for the liver transplant 65% of the costs.

Both medical insurance bureaus do not consider the possibility of two case payments for two different diagnoses which has to be treated within the hospital. Cases like these falls under the above mentioned procedures for special prices.

3. Limited applicability only to basic/ urban dwellers MI

¹ The definition depends on the situation: Some cases will suffice to show the complexity
Sample one: Appendectomy; removal of the appendix and after several days the patients' health is fully restored
Sample two: Diabetes mellitus type 2; patients received human insulin and learned to control his blood sugar and after several weeks the patients life condition are restored but he is still in need of medical treatment.
Sample three: Migraine; patient received CT, X-ray and other Lab tests but after all he received only a prescription for pain killer and that means the patient is not cured.
However the definition of cured is very vague in the Chinese context and needs a further definition of the provided service package, the quality of services and the expected results of services.
Qiqihar has recognized the difficulty of making this distinction and has abandoned the classification

The account settlement or payment method applies only for the basic medical insurance employees and retirees and the emerging system of the urban dwellers. The medical insurance fees for the public civil servant and other specific populations groups managed by the LSSBs are also covered under case payment. Nevertheless the basic medical insurance on the county level and the rural medical insurance scheme do not use the same payment method and within the municipality exist inequity of access to health care based on different payment methods and deductible/ceiling.

The disparity of coverage in the city of Qiqihar is very large. Only around 1.030.000 out of 5.6 million are insured within the basic medical insurance and more than 4.5 million are covered through the other schemes or not at all. The situation in Mudanjiang is similar to Qiqihar; around 400.000 out of around 2.6 million are insured within the basic medical insurance and more than 2 million are covered by other scheme or are uninsured. There is therefore very unequal access to health care within the system.

Moreover the population, not covered by BMI, use the current fee for service system. As a result the hospitals we met in the cities said that only around 20-30% of their income came from BMI (and of that up to 1/3 may be subject to special price negotiation). Therefore the bulk of hospital income arises from the part not regulated by case payment which may allow for cross-subsidization of BMI supported cases. This is particularly problematic since it is the poorer uninsured section of the population that do not have the protection of the case payment and have to support the costs of hospital inefficiency recovered through out of pocket payments

4. Absence of realistic actual cost data

Both cities using the so called “Three Lists” and merge the list of services and equipment/consumables together. The basis calculation of the prices or diagnosis based overlay ceiling line is the price list of the local pricing bureau which has to be approved by the local government. In terms of drugs they are using the wholesale price. However, the pricing system does not reflect the real cost of the hospital production or workload. For example, bed day cost which in one hospital was as low as 9 RMB per day could not possibly reflect real personnel, utility maintenance and capital depreciation costs. The basis of charging is therefore disconnected from real costs and budgets under which hospitals operate. In addition real costs charged to hospital accounts may not include proper accounting for capital and other accrual related costs since these are not recognised in the Ministry of Health’s current financial regulations.

On a positive note, one of the visited hospitals had introduced a type of cost centre system which allocated on a monthly basis all revenues and costs over the relevant departments of the hospital. This allocation system as well as covering direct costs also included costs for management overheads capital depreciation and apportioned utility and maintenance costs. On the basis of this, monthly surplus and deficit figures were calculated and appropriate salary bonuses paid. Without a detailed follow-up it is unclear how widespread such systems are but unquestionably the requirement to control cost under case payments (most hospital revenue was insurance based in this hospital) had contributed to this development ,

Case Payment Categorization

The medical insurance in Mudanjiang and Qiqihar exerted the quality control standards developed and published in 1994 by the Heilongjiang province. The guidelines provide defined standards for evaluation, medical pathways and prices. The quality control system forms the statutory framework for the case payment categorization and with the exception of the medical pathways is still used by the hospitals and basic medical insurance. However, the system has been elaborated and implemented by the health care authorities of the Heilongjiang province and it does not appear to have been cross referenced to their systems in China or worldwide. The standard model has not been updated according to international standards and is probably of date and in need of review the medical insurance agencies want to update these guidelines by the end of this year.

Differences

iii. General

1. Better staffed Administration in Qiqihar?

The staffing numbers of the administration in the Labour and Social Security Bureaus in China are a very sensitive and difficult issue. One of the problems is the financial ability of the local government of Mudanjiang and Qiqihar municipalities to provide adequate number of personal, equipment and software. Second, the system lacks appropriate workload indicators and quality measures in order to organize and identify the necessary number of personnel.

As for Qiqihar the current staffing is 40 permanent position and 30 on temporary basis plus around 230 temporary community workers for the introduction of the medical insurance urban dwellers. Around 25 people working in the medical insurance Mudanjiang on the account settlement, 8 on the contribution collection and planned 50 community workers for the implementation of the BMI urban dwellers. Both cities have similar personal figures in relation to the total insured population

ratio as for Qiqihar 0.007% and Mudanjiang 0.008% but the future pilot in Mudanjiang requires additional community worker for the identification and registration of the target population. Both medical insurance bureaus seems to be understaffed, under equipped and they are in need of more medical professional staff doing the medical assessment needs related to tariff changes and invoice assessment.

iv. Case Payment

1. More regular adjustment of tariff levels based on actual expenditure

The medical insurance Mudanjiang adjusted 197 diagnosis based tariffs in the past year which account for around 70% to 80% of total patient numbers.. The adjustments are done on occasional as opposed to annual basis and the tariff review is based on a sample of actual case costs, which reflect changes to the list prices done by the provincial and municipal pricing bureau. However the diagnosis based ceilings have to be revised due to the increased efficiency of the hospital workload, due to the medical technology and changes to the outdated framework/guidelines.

The medical insurance Qiqihar is adjusting around 100 of the most common diagnosis based tariffs on a yearly basis. The bureau introduced the same method like Mudanjiang in the year 1998. In the initial stage they analyzed the cases of the level 3 to level 1 hospitals which accounts for around 800 most common case types. The analysis includes the average length of stay, the average costs and the service items plus drugs (6.000 Service and Equipment items and 5.000 drugs). The fixed prices have been adjusted and increased due to the very low drug prices. The first adjustment has been done in case of significant reduction in the length of stay and as well in case of the hospital cost reduction if the real expenses are under 60% (in 2000). In 2008 the rate has been fixed on 80%.

2. Better Initial Foundation of Tariffs

Overall it was noted that special prices tended to be much more widely used in Mudanjiang rather than Qiqihar. This may in part be because Qiqihar used a far larger sample of initial cases (15,000) to determine initial case payment values and then have used actual expenditure from all cases (except outliers) to keep the payment levels under review,. It may also have something to do with the later introduction of the case payment system in Qiqihar. For example one of the complaints in Mudanjiang was that the case payment levels had been set before the requirement for blood screening for HIV/AIDs and this had significantly raised costs.

This reinforces the need for regular tariff review in the light of new medical procedures and pathways.

- a) Need for Case Payment Classification to be upgraded and linked more to international typology

In order to reach the above mentioned DRG payment method the guidelines have to be revised and updated for the Heilongjiang province and the cities Mudanjiang and Qiqihar.

For example a Prospective Payment System (PPS) needs to be introduced by the local government as a way to change hospital behavior through financial incentives that encourage more cost-efficient management of medical care. Under PPS, hospitals are paid a pre-determined rate for each patient admission. Each patient is classified into a Diagnosis Related Group (DRG) on the basis of clinical information. Except for certain patients with exceptionally high costs (called outliers), the hospital is paid a flat rate for the DRG, regardless of the actual services provided.

Each patient has to be classified into a Diagnosis Related Group (DRG) according to information from the Medical Record that appears on the invoice:

- Principal Diagnosis (why the patient was admitted)
- Complications and Co morbidities (CCs - other secondary diagnoses)
- Surgical Procedures
- Age
- Gender
- Discharge Disposition (routine, transferred, or expired)

Diagnoses and procedures must be documented by the attending physician in the patient's medical record. They are then coded by hospital personnel using ICD-10 nomenclature.

The coding process is extremely important since it essentially determines what DRG will be assigned for a patient. Coding an incorrect principal diagnosis or failing to code a significant secondary diagnosis can dramatically effect reimbursement.

For example there are 954 DRG categories defined by the DRG Centre “InEK” in Germany in 2006. Each category is designed to be "clinically coherent." In other words, all patients assigned to a DRG are deemed to have a similar clinical condition. The Prospective Payment System is based on paying the average cost for treating patients in the same DRG.

Each year DRG center “InEK” makes technical adjustments to the DRG classification system that incorporates new technologies (e.g. laparoscopic procedures) and refines its use as a payment methodology. The DRG Centre and Medical Centre called “DIMDI” also initiates changes to the ICD-10 coding scheme. The DRG assignment process is computerized in a program called the grouper that is used by hospitals and medical insurance.

Each year “InEK” also assigns a relative weight to each DRG. These weights indicate the relative costs for treating patients during the prior year. The national average charge for each DRG is compared to the overall average. This ratio is published annually for each DRG. A DRG with a weight of 2.0000 means that charges were historically twice the average; a DRG with a weight of 0.5000 was half the average.

Ten samples of DRGs and their relative weights:

	<u>DRG</u>	<u>DRG Description</u>	<u>% Total</u>	<u>Rel. Wt.</u>
1	127	Heart Failure & Shock	5.99	1.0234
2	089	Simple Pneumonia & Pleurisy Age>17	3.85	1.1447
3	014	Specific Cerebrovascular Disorders except TIA	3.18	1.2056
4	430	Psychoses	3.18	0.9153
5	088	Chronic Obstructive Pulmonary Disease	3.11	1.0067
6	209	Major Joint & Limb Reattachment Procedures, Lower Extremity	2.78	2.3491
7	140	Angina Pectoris	2.33	0.6241
8	182	Esophagitis, Gastroent. & Misc. Digest Disorders Age>17	2.09	0.7617
9	174	G.I. Hemorrhage w/CC ¹	2.07	0.9657
10	296	Nutritional & Misc. Metabolic Disorders Age>17	1.93	0.9313

DRG-based Payments

The DRG payment for a patient is determined by multiplying the relative weight for the DRG by the hospital's base payment rate:

$$\text{DRG PAYMENT} = \text{WEIGHT} \times \text{RATE}$$

The hospital's payment base rate is defined by governmental regulations and is updated annually to reflect inflation, technical adjustments, and budgetary constraints. There are separate rate calculations for large urban hospitals and other hospitals. There are also technical adjustments for local wage variations, teaching hospitals, and hospitals with a disproportionate share of financially indigent patients.

Management Perspectives

The average DRG weight for all of a hospital's volume is called the case mix index (CMI). This index is very useful in analysis since it indicates the relative severity of a patient population and is directly proportional to DRG payments. When making comparisons among various hospitals or patient groups, the case mix index can be used to adjust indicators such as average charges. (Case mix adjusted average charges would be actual charges divided by the CMI. Such adjustments are sometimes referred to as "Average charges for a weight of 1.0000.")

The DRG classification system is a useful tool for managing inpatient quality measurements and operating costs. It groups patients by diagnostic category for analysis and provides several key measurements of resource utilization (e.g. average length of stay versus published national averages).

- b) Wide as opposed to narrow coverage of case payment for all acute care

The DRG case payment method used in UK and Germany applies for all types of acute and as well chronic diseases and the health care services as part of the treatment process. The method applies as well to all patients whether they are insured or not insured.² As a result DRG case payment covers 80% plus of a hospital's revenue, and allows therefore only very limited scope to offset costs that exceed the tariff against other non-case payment revenue.³

The hospital funding in China is still generally based on a combination of the budget based system and fee for service payments system, which limits the incentive to

² Although since the UK is not an insurance based system, all patients except temporary visitors from abroad are covered

³ Some treatment is still outside the case payment system particularly for outpatient and mental health and psychiatric services. In addition hospitals may earn non treatment related revenue from various fees and charges (private rooms, hospital car parking), research projects and grant funding for hospital based teaching

improve overall efficiency and drop un-productive or under-utilised services. If case payment are to have a major impact on cost containment, their coverage of hospital income needs to be expanded.

c) Regular review of tariff rates

The review and calculation of tariff rates is a critical part of the case payment system, because the process is required to provide incentives to both partners whose basic goals seem to be diametrically opposed. For medical insurance the key objectives are to keep the tariff structure simple so as to make financial planning and control more straightforward and to keep downward pressure on prices as a way for incentivising providers to look for productivity improvements. For hospitals they key objectives are to make the tariff more complex to reflect the range of cost variation and in particular the incidence of high cost that may be met for a particular DRG. This minimises the risk to hospital finances. In addition the hospitals usually seek to cover the costs of medical inflation which generally exceed general consumer price inflation.

Although UK and German experience with DRG case payment is still relatively short. there is evidence that for the full benefits of case payment to be realised, a 'win-win' situation needs to be created for providers and purchasers. The basis of the 'win-win' situation is that there needs to be structural stability in the tariff, which gives the providers incentives to invest and innovate in the short-term and extract profit from that innovation. This needs to be accompanied by periodic adjustment of tariff structure (between 3 – 5 years) to allow medical insurance and the patient to financially benefit from more cost-effective medical pathways and lower costs

The other aspect is that tariffs need to be adjusted annually but at a rate below that of medical inflation to encourage productivity improvement. In addition the tendency in both countries has been to expand the number of DRGs to prevent too high a cost variation in some DRG categories; and as far the UK is concerned to introduce for some DRGs different tariff levels for elective and emergency procedures. to reflect differences in mobilisation costs and length of stays.

d) Definition of actual cost data using international accounting standards and cost management allocation practices

Given that there is no systematic collection of real cost data and that there is no consistency in financial and management accounts, the Heilongjiang pilot uses the eminently sensible approach of using the three lists as an approximation of actual cost. As an initial first step this is sensible but carries the risk if continued of providing perverse incentives – and in particular of continuing the over-prescription of

drugs as a way to earn money. By making the length of stay very cheap, it also does not provide incentives to reduce length of stay and opt for day surgery⁴.

e) Removal of subsidies

Hospitals in UK and Germany do not receive any direct subsidies by the state. Both states removed the system of subsidies for salaries or other expenses and require the recovery of all costs through the DRG payment method.

In contrast as noted above there is still significant reliance in the Chinese system on state subsidy. For example of the three hospitals we talked to in Qiqihar, in 2007 one of the hospitals received a 30 million RMB subsidy (which basically provided the surplus), one received 4 million RMB and the third claimed to receive nothing at all. Often the extent of the subsidy is partly determined by a historic relationship with a particular group of enterprises. Thus the Forestry Hospital in Mudanjiang received subsidy from the provincial State Forestry organization and the Qiqihar hospital received its subsidy from the provincial railway bureau. If all hospitals received a similar rate of subsidy, this may not be particularly damaging, but given that the amounts vary significantly this distorts the competitiveness of different hospitals

a) Extension to other insurances (e.g. RCMS, private health insurance funds and private patients)

At present hospitals expenditures are determined by a governmental budget system and have to be approved by the local government. The revenues are financed in the proportion 0 -10% by the government, 20 to 50% by the medical insurance and the majority by the patients through out of pocket payments. The case payment method established for Mudanjiang and Qiqihar does not of course apply for the state subsidy system and the out-of pocket payments.

To create a meaningful system means that the case payment method should be extended to the RCMS, private health insurance funds and the private patients. The project would like to assist the hospitals; the entire internal calculation and budgetary

⁴ Two of the three hospitals we talked to Qiqihar explained they had recently and were in the process of adding significantly to bed capacity – in the case of no 3 Hospital attached to the medical university increasing the number of beds from 950 to 1350. This may reflect the impact of urbanization or initial low capacity but is not suggestive of increased use of day surgery.

system needs to be changed if they implement the case payment method for all patients irrespective of their financing.

b) Better alignment of fee for service rates with real cost

In the current situation the fee for service system built the basis of the diagnosis case based payment mechanism of Mudanjiang and Qiqihar. The prices are calculated by the pricing bureaus of the governments. However, the medical insurance bureaus and the hospitals complain that the calculations do not reflect the real cost of the treatment process. The project would like to assist the medical insurance and the pricing bureaus to introduce a real cost based calculation method which satisfies the demand of the provider, the cost containment of the medical insurance and the patients.

c) Updating of Case payment typology and adjustment of tariffs

The current guidelines for case payment typology and the calculation of tariffs have to be updated and adjusted. International methods should be introduced in the revision of the guideline and upgrading the system for the medical insurance funds and hospitals.

A key issue that was highlighted is the need to look at the possibility of allowing a more than one case payment in cases of co-morbidity or complications. Cases could attract the a first case payment of the highest tariff and then one or more scaled down tariffs for co-morbidities to reflect the marginal cost of providing additional treatment during the hospital stay. Another related aspect is the incentive conveyed the case payment. For example in Qiqihar the case payment level for a caesarean section paid by maternity insurance was more than twice that of a normal delivery which does not of course provide an incentive to reduce the high rate of CS sections.

d) Using Case Payment information to improve budgetary planning

As the EUCSS team has discovered in other provincial visits, expenditure budgets for BMI are global allocations, driven primarily buy the possibilities for contribution collection (including fulfilling Ministry targets for expansion) and the need to provide for reserves. The case payment system potentially offers both municipalities an opportunity to do more sophisticated expenditure planning and in particular examine trends in allocation of expenditures between different disease types which may in turn signal the need to consider changes in benefit packages and possibly additional funding.

In each of these areas the EUCSS project team can assist the medical insurance bureaus in implementing scheme revisions and in providing additional seminars and workshops on both technical and policy related aspects of extending case payments in the region.

Annex 1 Facts at a Glance

	Mudanjiang	Qiqihar
Participants	270,000 (BMI - core urban area) 400,000 (BMI - wider area)	820,000 (BMI- wide area) 210,000 Urban Dwellers
Pooling Areas	1 Municipal + 6 County	1 Municipal and 9 County
Contribution Rate	9 % of average gross salary (previous year) – Employer 7, Employee 2% Allocation to IA – above 46 years old 4%, below, 3%	7 % of average gross salary (5% employer, 2% employee) Bankrupt enterprise 50,000 RMB one time payment Allocation to IA – 2.5% for retired, 2.4% over 40, 2.3% under 40
Approximate Revenue & Expenditure	Revenue 0.2 bn RMB Expenditure 0.11 bn social pool, 0.08 bn RMB allocation to IA, Planned reserve 0.01 bn RMB Accumulated Surplus Not known	Revenue 0.21 bn Expenditure 0.18 bn social pool, 0.03 bn allocation to Individual account Accumulated BMI reserve 0.61 bn RMB, split 50:50 between social pool and IA
Deductibles/ Co-Payments	Level 3 Hospital – 300 Deductible Level 2 Hospital – 200 Deductible Level 1 – Hospital – 100 Deductible Level 3 Hospital Co-Payments Cases costing under 5,000 RMB - 20 % Co-payment Basiv(15% for retirees) For cases costing 5,000-10,000 RMB – 15 % Co-Payment, 10 % for	Level 3 Hospital – 500 Deductible Level 2 Hospital – 300 Deductible Level 1 – Hospital – 300 Deductible Level 3 Co-Payment 15 % up to 30,000 RMB Level 2 and 1 – 7% up to 30,000 RMB Supplementary Scheme Annual Lump sum payment of 9^ RMB



	<p>Retirees</p> <p>For Co-payments (10,000 – 30,000) – 10% (5% for retirees)</p>	<p>Benefit Level 270,000</p> <p>Level 3 Co-payment 10 %</p> <p>Level 2 – 8%</p>
No of Hospital Medical Insurance has contracts with	<p>Level 3 – 5</p> <p>Level 2 – 23</p> <p>Level 1-7</p>	<p>Level 3 – 7</p> <p>Level 2 – 28</p> <p>Level 1 – 10</p>
Approximate amount of staff	<p>80 of which 25 in invoice section and 8 in Contribution collection</p> <p>50 staff planned for community Urban Residents</p>	<p>70 of which 30 on temporary contract</p> <p>230 staff in communities contracted annually</p>
Case Payment Categories	672	823
Scaling Factor applied to case payment for Level 2 and Level 1	80 % - Level 2, 60% - Level 1	
Volume of Cases covered by Special prices	Up to 30%	Around 15 %