

## Chapter 4 Medical Benefits

Medical expenditure of the National Health Insurance (NHI) scheme is based on service volume. In addition, there is a gradual process to set the case-payments and global budget payment systems into action. The global budget payment system was implemented in stages in July 1998, starting with dental clinics followed by Chinese medical outpatient services and western medical clinics. The global budget payment system for hospitals was started in 2002. Expenditure by case-payment that allocated more RVU for higher medical resource consumption was implemented in July 2004 and is currently applicable to 54 items. Furthermore, in order to enhance quality of care, a project aimed at improving the system of medical benefit for diseases began in 2001 with the expectation of developing expenditure methods which would ensure quality of medical services in a cost efficient manner. At the present, 5 items are covered, including breast cancer, diabetes, asthma, hypertension and perinatal projects.

According to the “Regulations Governing Examination of Medical Care Services for National Health Insurance Medical Care Institutions”, applications, complete with relevant documents, for cases serviced by a medical services institution under the NHI in the current month should be submitted in paper or electronic format by the 20th of the following month. Applications in electronic format may be divided in two stages, one from the 1st to the 15th of the month and the other from the 16th to the month end, and submit the relevant documents (summary reports) by the 5th and the 20th of the following month. For filing of inpatient cases, if the insured has not checked out of the hospital at the end of the current month, the expenses should be filed altogether after the insured has checked out. For chronically hospitalized patients, filing may be done every two months. Monthly filing is also allowed if deemed necessary.

Medical service institutions under the NHI should finish filing within the specified period, leaving no incomplete applications or errors. The insurer should process the provisional payments within the time limit since receiving the documents and should deliver the reviewed results within 60 days. If the results cannot be delivered in time, a provisional payment of the full amount should be made. Any disagreement against the review results of the medical services raised by the medical services institutions under the NHI may be disputed within 60 days from the arrival of the notice from the insurer. The insurer should review the disputed cases within 60 days of receiving such complaints. For the sectors operating under the global budget payment system, if a medical services institution under the NHI disagrees with the disputed results and is qualified for a second review, it may apply for a one-time second review within 15 days of receiving the disputed results. The insurer should deliver the reviewed results within 45 days of accepting the application for a second review.

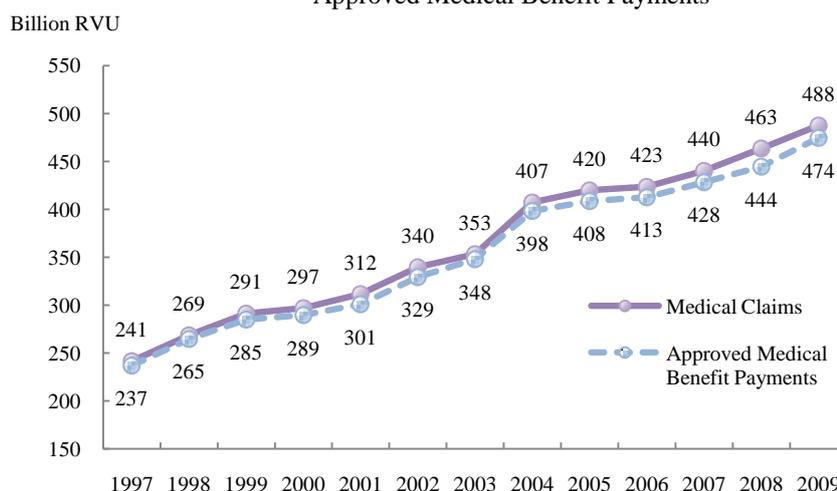
## I. Historical Medical Benefit Claims and Approved Medical Benefit Payments

**Compared to 1999, the increase of medical benefit claims was equivalent to that of approved medical benefit payments**

The medical benefit claims were 488 billion RVU in 2009, 326 billion RVU for outpatient services and 162 billion RVU for inpatient services. The approved medical benefit payments were 475 billion RVU (NT\$444 billion), 319 billion RVU (NT\$300 billion) for outpatient services and 156 billion RVU (NT\$144 billion) for inpatient services.

Compared to 1999, the overall medical benefit claims in 2009 increased by 67.4%, outpatient claims increased by 64.7% and inpatient claims increased by 72.9%. The approved medical benefit payments (RVU) increased by 66.5%, outpatient payments increased by 63.4% and inpatient payments by 73.2%.

Figure 27 Historical Medical Benefit Claims and Approved Medical Benefit Payments



## II. Medical Benefit Claims

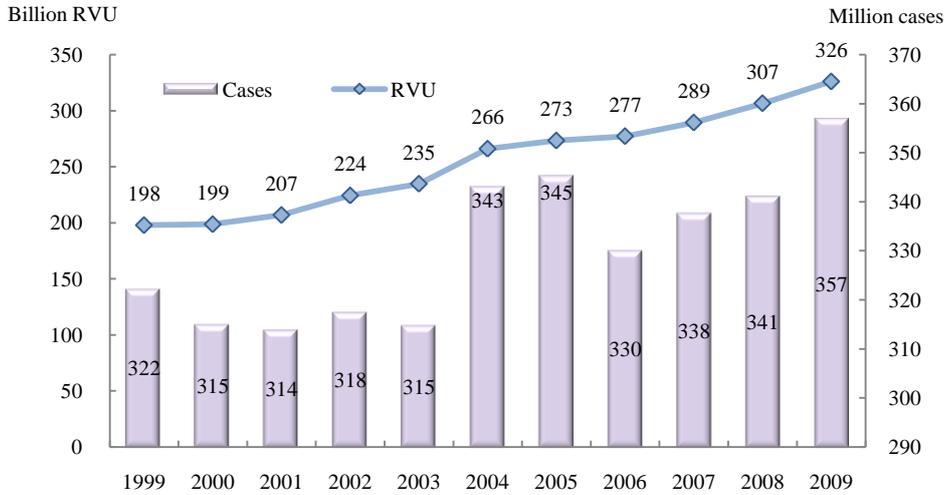
### 1. Outpatient Services

**(1) Outpatient medical benefit claims increased by 6% from the previous year.**

A total of 357 million of outpatient service cases were filed in 2009, an increase of 4.6% from the previous year. The average annual increase in the past ten years was 1.0%. Outpatient medical benefit claims amounted to 326 billion, an increase of 6.3% from the previous year; the average annual increase in the past ten years was 5.1%. The average points per case were 914 RVU, an increase of 1.7% from the previous year.

A total of 15 million of outpatient commission cases (4.1%) were filed in 2009, the medical benefits amounted to 7 billion RVU (2.2%).

Figure 28 Historical Outpatient Medical Benefit Claims

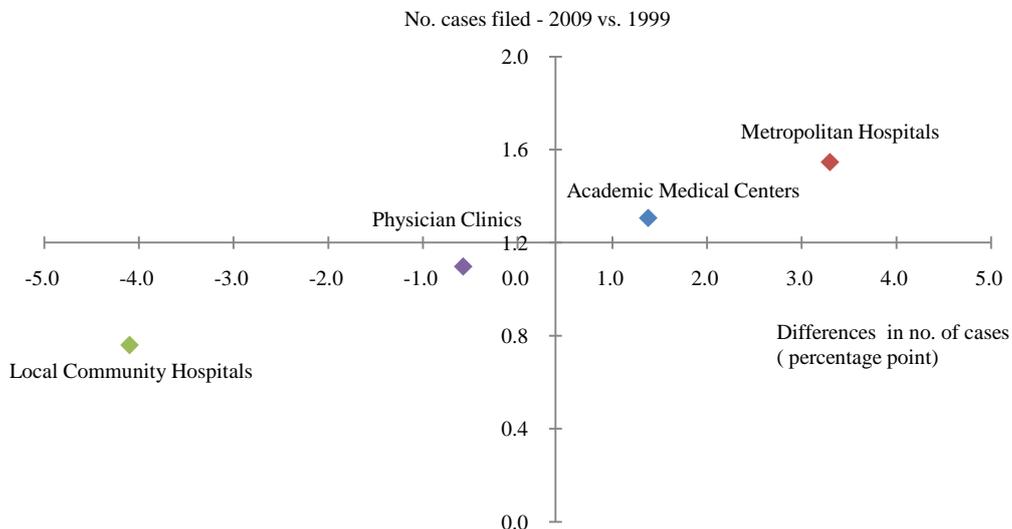


**(2) Compared to 1999, outpatient service cases filed for local community hospitals decreased by 4.1 percentage points.**

In 2009, physician clinics and dental clinics had the highest amount in overall outpatient service cases filed at 251 million cases (70.4%), followed by metropolitan hospitals at 41 million cases (11.6%), academic medical centers at 32 million cases (9.0%) and local community hospitals at 32 million cases (9.0%).

Compared to 1999, outpatient service cases filed decreased by 4.1 percentage points for local community hospitals, 0.6 percentage points for physician clinics and dental clinics, while increased by 3.3 percentage points for metropolitan hospitals and 1.4 percentage points for academic medical centers.

Figure 29 Outpatient Service Cases Filed

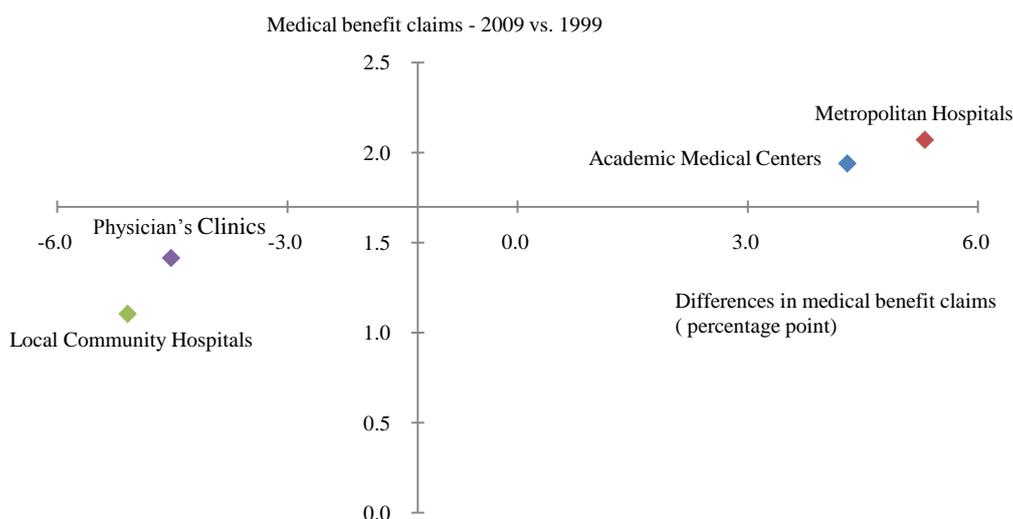


- (3) **For the share of outpatient medical benefit claims, academic medical centers and metropolitan hospitals showed an upward trend while local community hospitals and physician clinics showed a downward trend.**

In 2009, physician clinics and dental clinics had the highest amount in total outpatient medical benefit claims at 135 billion RVU (44.3%), followed by academic medical centers at 67 billion RVU (21.9%), metropolitan hospitals at 66 billion RVU (21.5%) and local community hospitals at 38 billion RVU (12.3%).

Compared to 1999, outpatient medical benefit claims increased by 5.3 percentage points for metropolitan hospitals, 4.3 percentage points for academic medical centers while decreased by 5.1 percentage points for local community hospitals and 4.5 percentage points for physician clinics and dental clinics.

Figure 30 Outpatient Medical Benefit Claims

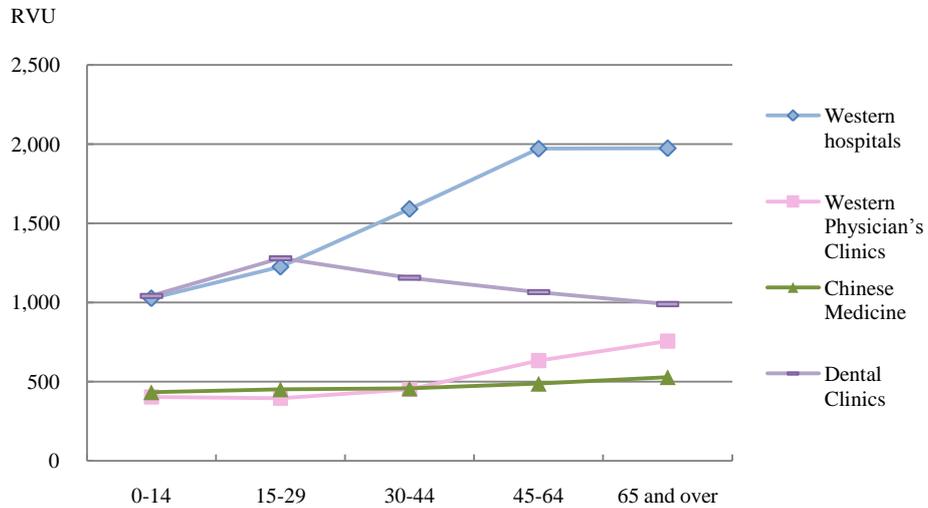


- (4) **Western hospitals had the highest outpatient average medical benefit claims per case at 1,769 RVU (Commission cases excluded).**

Broken down by global budget payment system, western hospitals had the highest outpatient average medical benefit claims per case at 1,769 RVU, followed by dentistry at 1,123 RVU, western physician clinics at 533 RVU and Chinese medicine at 472 RVU.

The outpatient average points per case for western hospitals and Chinese medicine increased with age. Western physician clinics showed the lowest one for age 15-29 at 394 RVU, and increased later on with age. Dentistry showed the highest one for age 15-29 at 1,280 RVU, and decreased later on with age.

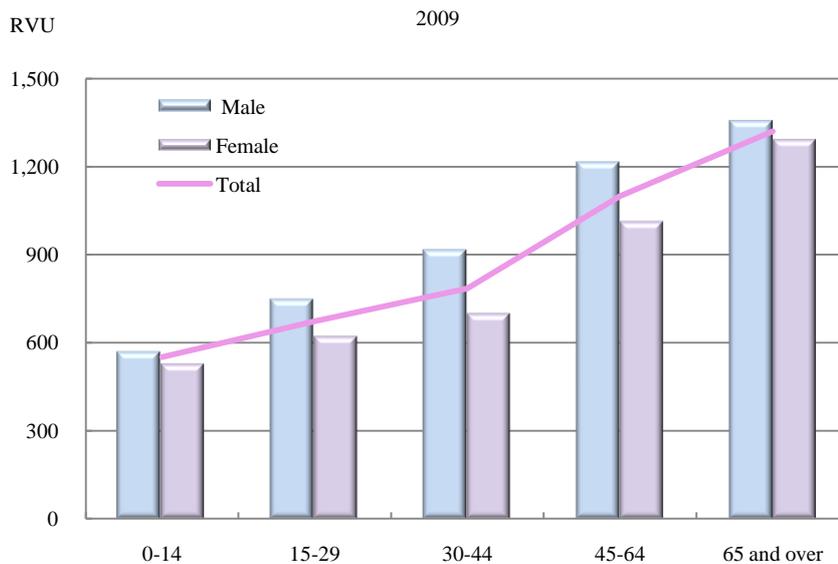
Figure 31 Outpatient Average Medical Benefit Claims per Case by Global Budget Payment System and Age



**(5) Outpatient average medical benefit claims per case were higher for males than for females. (Commission cases excluded)**

Outpatient average medical benefit claims per case were 1.1 times higher for males; further, broken down by age, the biggest difference occurred for age 30-44 at 1.3 times while there was no significant difference for age 65 and over. Average points per case increased with age, regardless of gender.

Figure 32 Outpatient Average Medical Benefit Claims per Case by Gender and Age



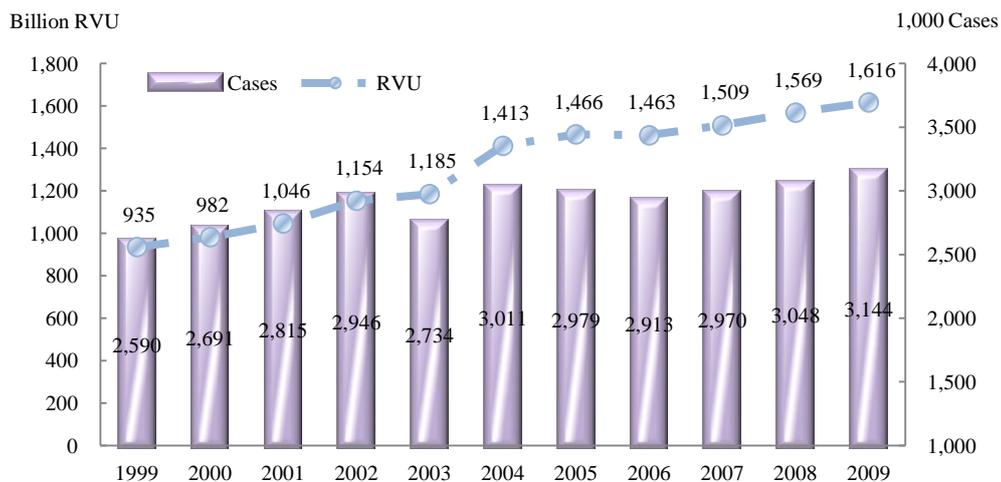
## 2. Inpatient Services

### (1) Inpatient medical benefit claims increased by 3% from the previous year.

A total of 3 million of inpatient medical cases were filed in 2009, an increase of 3.1% from the previous year. The medical benefits amounted to 162 billion RVU, an increase of 3.0% from the previous year. The average points per case were 51,420 RVU; the average length of stay in hospitals was 10.19 days, decreased slightly by 0.1% and 0.5% respectively compared to the previous year. The average annual increases for service cases and medical benefits filed in the past ten years were 1.6% and 5.5%.

A total of 102 thousand of inpatient commission cases (3.2%) were filed in 2009, the medical benefits amounted to 3 billion RVU (1.2%).

Figure 33 Historical Inpatient Medical Benefit Claims



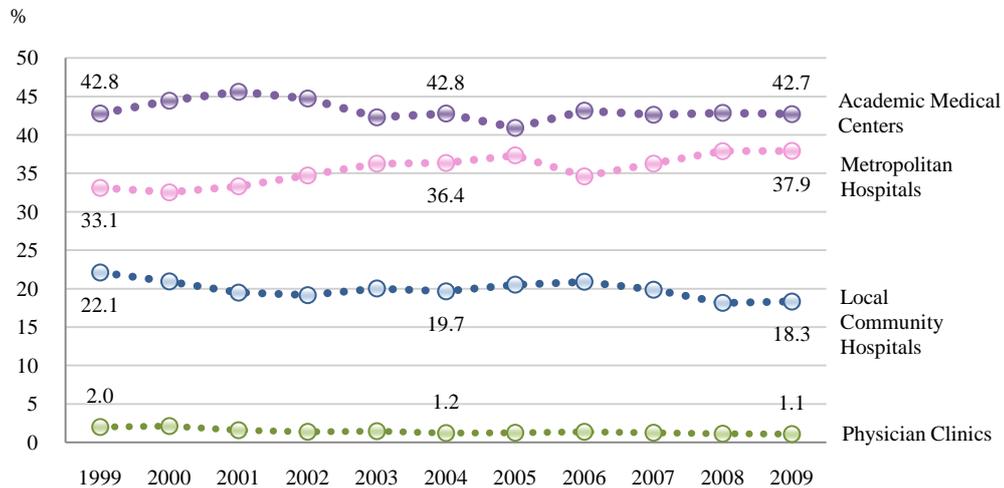
### (2) For the share of inpatient medical benefit claims, metropolitan hospitals showed an upward trend while local community hospitals showed a downward trend.

In 2009, metropolitan hospitals had the highest amount in total inpatient service cases filed at 1,352 thousand cases, followed by academic medical centers at 1,013 thousand cases and local community hospitals at 719 thousand cases. Academic medical centers had the highest amount in total inpatient medical benefit claims at 69 billion RVU (42.7%), followed by metropolitan hospitals at 61 billion RVU (37.9%) and local community hospitals at 30 billion RVU (18.3%).

Compared to 1999, local community hospitals showed the largest change in the share of inpatient service cases filed, decreased by 13.7 percentage points, metropolitan hospitals increased by 10.5 percentage points, physician clinics and

dental clinics decreased by 1.9 percentage points and academic medical centers showed no significant difference.

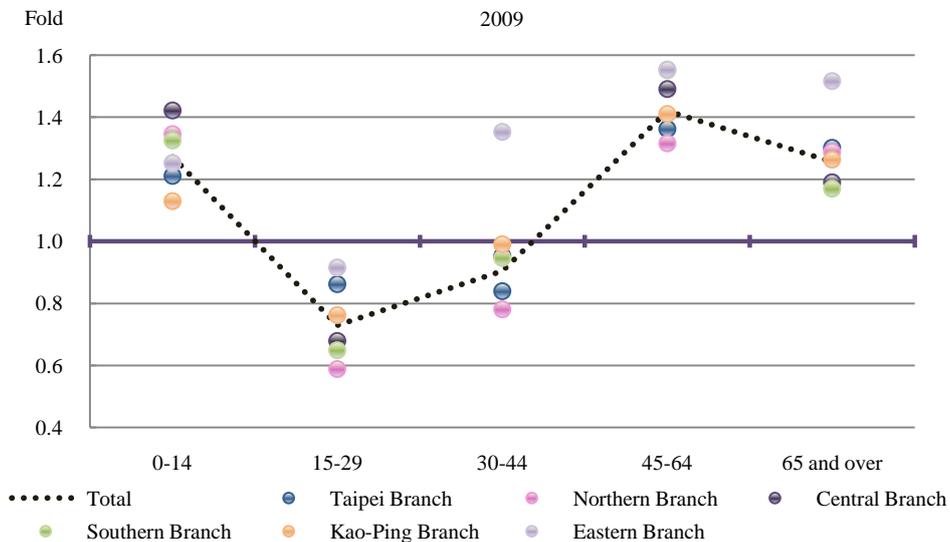
Figure 34 Historical Inpatient Medical Benefit Claims by Contracted Category



**(3) Inpatient medical benefit claims were higher for males than for females (Commission cases excluded)**

Inpatient medical benefit claims were 1.2 times higher for males than for females in 2009 (commission cases excluded), and were higher for males in every age group except age 15-29 and 30-44. Broken down by the BNHI, inpatient medical benefit claims were higher for males than for females in all the branches; broken down by age further, the Eastern Branch had the highest ratio of medical benefit claims for males to females for every age group except 0-14, the ratio showed a significant different from the overall trend for age 30-44.

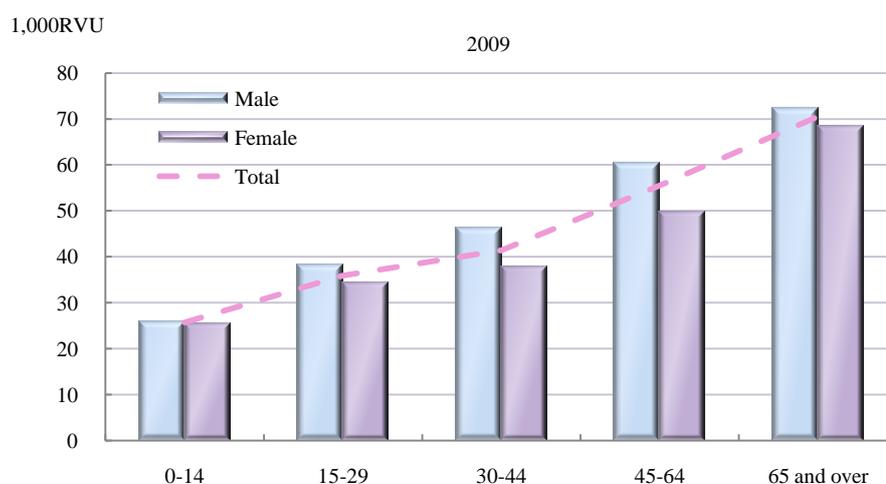
Figure 35 Inpatient Medical Benefit Claims - Males vs. Females



**(4) Inpatient average medical benefit claims per case were higher for males than for females (Commission cases excluded)**

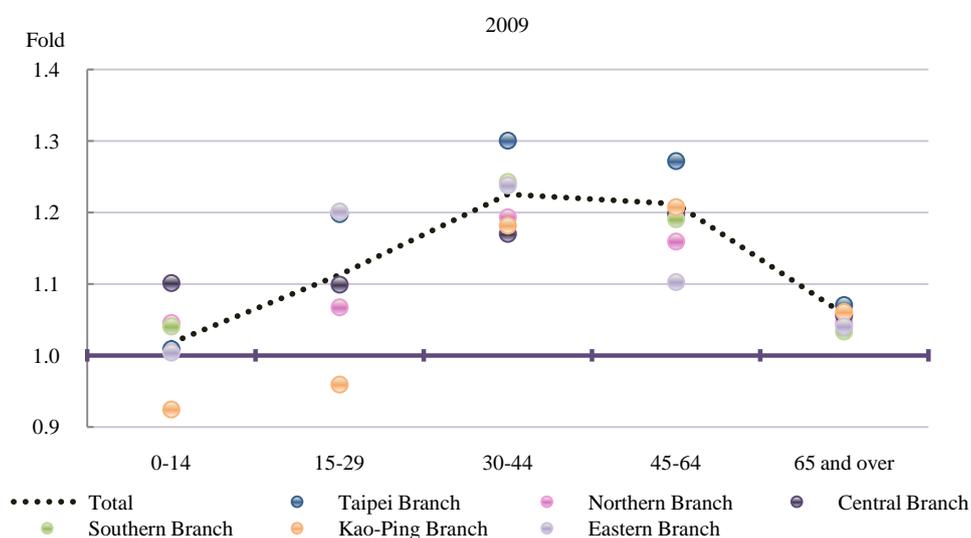
Inpatient average medical benefit claims per case were 1.2 times higher for males in 2009 (commission cases excluded). Of which, there were differences occurring in age 30-44 and 45-64, while there was no significant difference for age 0-14.

Figure 36 Inpatient Average Medical Benefit Claims per Case by Gender and Age



Broken down by the BNHI, inpatient average medical benefit claims per case were higher for males than for females in all the branches; among which, Taipei Branch had the biggest difference. In terms of the BNHI and age, age 0-14 and 15-29 of the Kao-ping Branch showed the greatest deviation from the overall trend, and the inpatient average medical benefit claims per case were higher for females.

Figure 37 Inpatient Average Medical Benefit Claims per Case - Males vs. Females

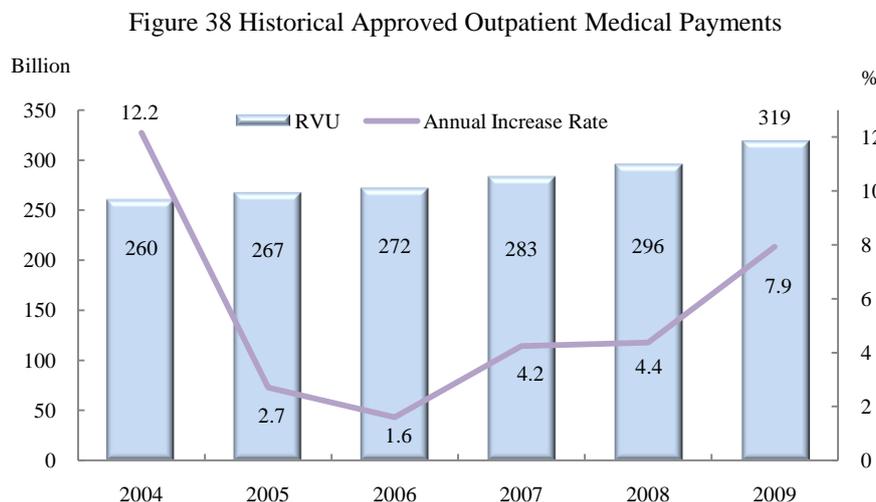


### III. Approved Medical Benefit Payments

#### 1. Outpatient Services

**(1) Average annual increase for approved outpatient medical benefit payments was 4.1% in 2004- 2009.**

A total of 357 million outpatient service cases were approved in 2009, increased by 6.4% from the previous year; the average annual increase was 0.8% in 2004-2009. The approved outpatient medical benefit payments were 319 billion RVU in 2009, increased by 7.9% from the previous year. The average annual increase was 4.1% in the past five years. The average approved points per case were 894 RVU, increased by 1.5% from the previous year.

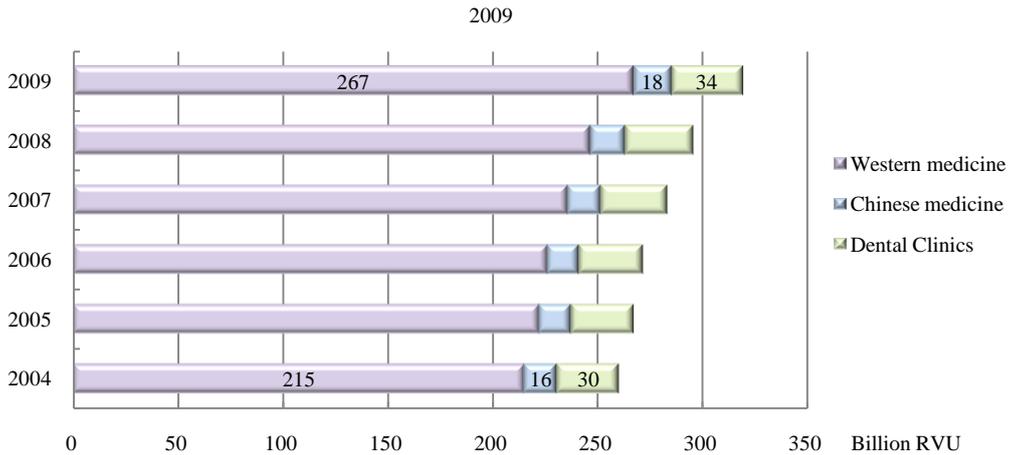


**(2) Dentistry had the highest approved average outpatient medical benefit payments**

Broken down by global budget payment system, Western medicine had the highest amount in total approved outpatient medical service cases filed in 2009 at 287 million cases (80.6%), an increase of 6.4% from the previous year; followed by Chinese medicine at 39 million cases (10.8%), an increase of 8.1% from the previous year; and dentistry at 31 million cases (8.6%), an increase of 4.3% from the previous year. Western medicine had the highest amount in total approved outpatient medical benefit payments at 267 billion RVU (83.7%), an increase of 8.3% from the previous year; followed by dentistry at 34 billion RVU (10.69%), an increase of 4.4% from the previous year; and Chinese medicine at 18 billion RVU (5.73%), an increase of 9.1% from the previous year. Dentistry had the highest approved average payments per case at 1,101 RVU, followed by Western medicine at 929 RVU, and dentistry at 470 RVU.

Average annual increases of approved outpatient medical benefit payments were 4.4% for western medicine, 2.8% for Chinese medicine and 2.8% for dentistry in 2004-2009; average annual increases of approved outpatient service cases were 0.5% for western medicine, 2.2% for Chinese medicine and 1.9% for dentistry.

Figure 39 Approved Outpatient Medical Benefit Payments by Category

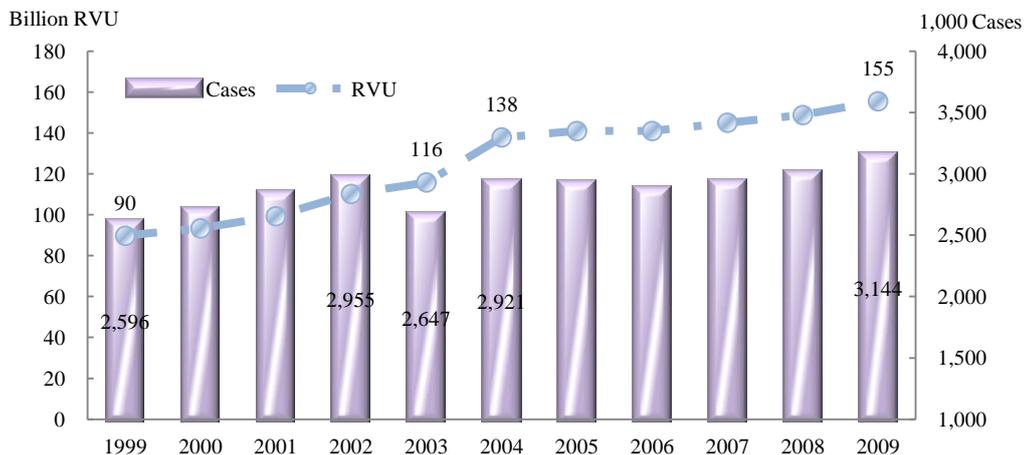


## 2. Inpatient Services

### (1) Approved inpatient medical benefit payments increased by 4.5% from the previous year.

The approved inpatient medical benefit payments were 156 billion RVU in 2009, an increase of 4.5% from the previous year. Approved average inpatient payments per case were 49,452 RVU, a decrease of 0.4% from the previous year. Compared to 1999, approved inpatient medical payments increased by 73.2%; approved average medical payments per case increased by 43.1%

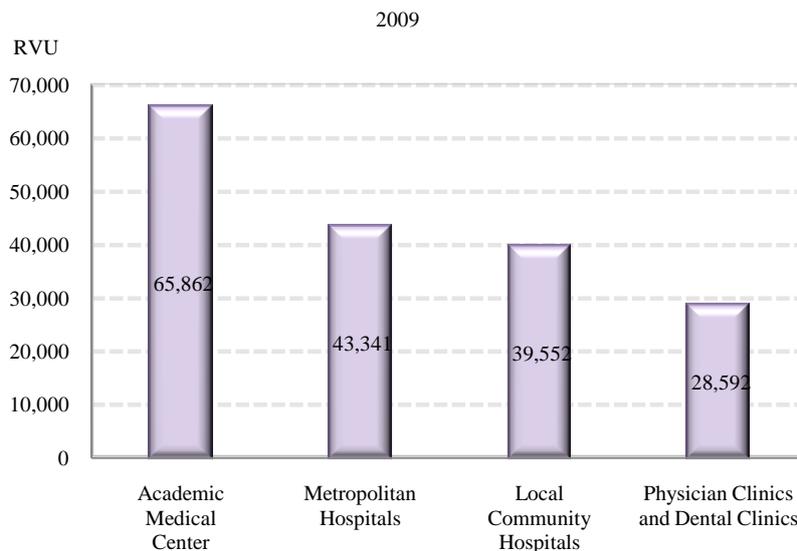
Figure 40 Historical Approved Inpatient Medical Benefit Payments



**(2) Academic medical centers had the highest amount in approved average inpatient medical benefit payments per case.**

Academic medical centers had the highest amount in total approved inpatient benefit payments at 67 billion RVU (42.9%) in 2009, followed by metropolitan hospitals at 59 billion RVU (37.7%) and local community hospitals at 28 billion RVU (18.3%). The approved average inpatient medical payments per case were highest for academic medical centers at 65,862 RVU, followed by metropolitan hospitals at 43,341 RVU, and local community hospitals at 39,552 RVU. The average cost of stay per day in hospitals was highest for physician clinics and dental clinics at 8,210 RVU, followed by academic medical centers at 7,618 RVU and local community hospitals at 4,585 RVU.

Figure 41 Average Approved Inpatient Medical Benefit Payment per Case



#### **IV. Medical Expenses (Copayment included)**

##### **1. Outpatient Services**

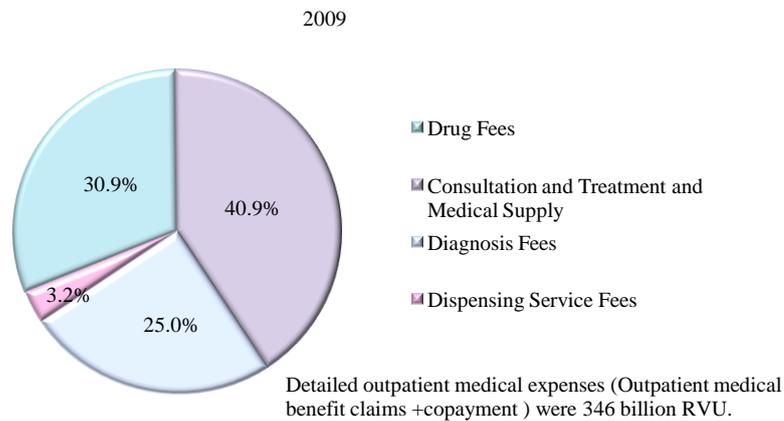
**(1) Consultation and treatment and medical supply accounted for 41% of the outpatient medical expenses**

The outpatient medical expenses in 2009 were 346 billion RVU, 142 billion RVU for consultation and treatment and medical supply (40.9%), 107 billion RVU (30.9%) for drug fees, 86 billion RVU (25.0%) for diagnosis fees, and 11 billion RVU (3.2%) for dispensing service fees.

Compared to 2004, consultation and treatment and medical supply increased by 27 billion RVU, an average annual increase of 4.4%; drug fees increased by 19

billion RVU, an average annual increase of 4.0%; diagnosis fees increased by 7 billion RVU, an average annual increase of 1.6%; dispensing service fees increased by 2 billion RVU, an average annual increase of 4.3%.

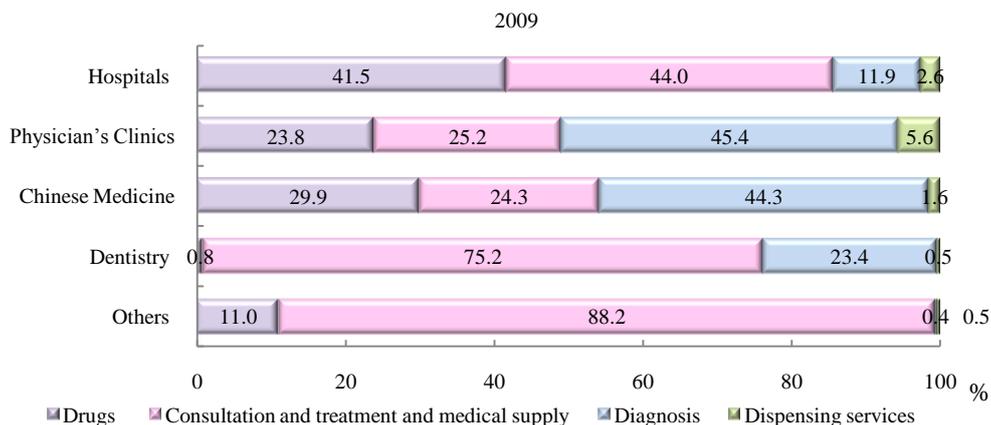
Figure 42 Outpatient Medical Expenses



**(2) Drug fees accounted for 42% of outpatient medical expenses for western hospitals and 24% for physician clinics and 30% for Chinese medicine.**

Broken down by the global budget payment system, the highest amount of the outpatient medical expenses for hospitals was 80 billion RVU for consultation and treatment and medical supply (44.0%), followed by drug fees at 75 billion RVU (41.5%). For physician clinics, the highest amount was 47 billion RVU for diagnosis fees (45.4%), followed by consultation and treatment and medical supply at 26 billion RVU (25.2%). For Chinese medicine, the highest amount was 9 billion RVU for diagnosis fees (44.3%), followed by drug fees at 6 billion RVU (29.9%). For dentistry, the highest amount was 27 billion RVU for consultation and treatment and medical supply (75.2%), followed by diagnosis fees at 8 billion RVU (23.4%). For other sectors of the global budget payment system, consultation and treatment and medical supply had the highest expenses at 4 billion RVU (88.2%).

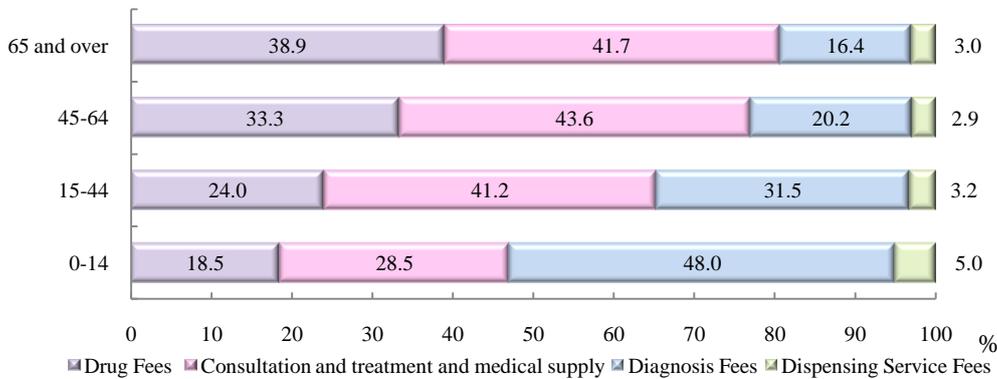
Figure 43 Outpatient Medical Expenses – by Global Budget Payment System



**(3) As age increased, share of outpatient medical expenses increased for drug fees, decreased for diagnosis fees.**

For age 0-14, the highest outpatient medical expenses were diagnosis fees (48.0%), followed by consultation and treatment and medical supply (28.5%). For age 15-44, the highest expenses were consultation and treatment and medical supply (41.2%), followed by diagnosis fees (31.5%). For both age 45-64 and age 65 and over, the highest expenses were consultation and treatment and medical supply, followed by drug fees.

Figure 44 Outpatient Medical Expenses – by Gender and Age  
2009

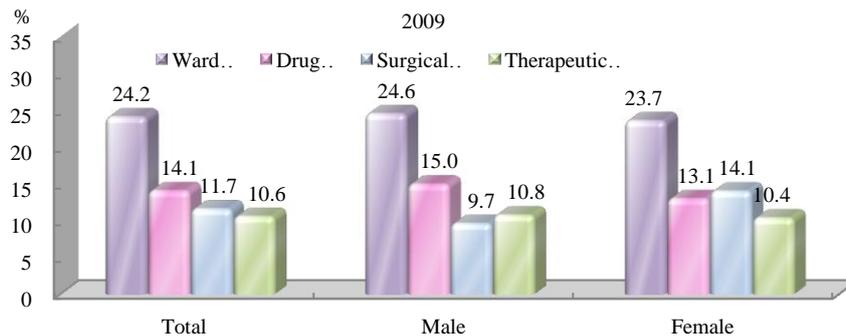


**2. Inpatient Services**

**(1) Ward, drug, and surgical fees accounted for more than 50% of inpatient medical expenses.**

Inpatient medical expenses in 2009 amounted to 163 billion RVU. The highest amount was for ward fees at 39 billion RVU (24.2%), followed by drug fees at 23 billion RVU (14.1%) and surgical fees at 19 billion RVU (11.7%). Broken down by gender, inpatient medical expenses were 90 billion RVU for males and 73 billion RVU for females.

Figure 45 Inpatient Medical Expenses by Gender



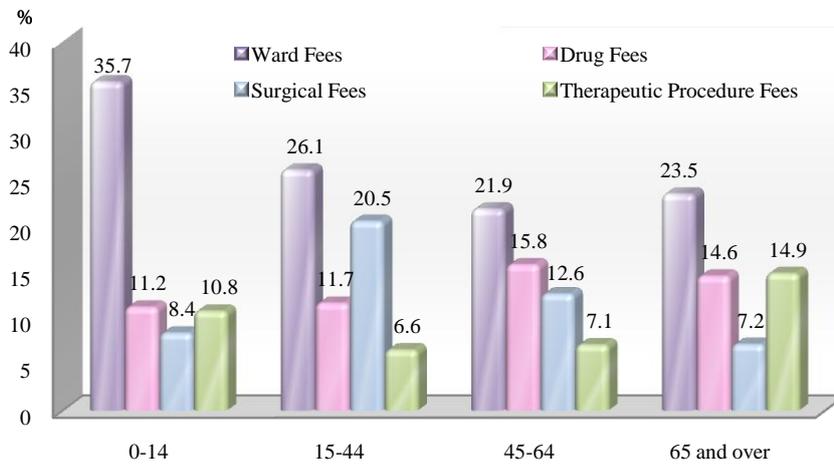
The inpatient medical expenses were 90 billion RVU for male and 73 billion RVU for female in 2009.

**(2) Ward fees were the highest inpatient medical expenses for all age groups.**

Broken down by age group, inpatient medical expenses accounted for 5.2% for age 0~14, 21.2% for 15~44, 29.2% for 45~64, and 44.4% for 65 and over. The three highest expenses were ward fees, drug fees and therapeutic procedure fees for age 0~14, ward fees, surgical fees and drug fees for age 15~44, ward fees, drug fees and surgical fees for age 45~64 and ward fees, therapeutic procedure fees and drug fees for age 65 and over.

Figure 46 Inpatient Medical Expenses by Age

2009



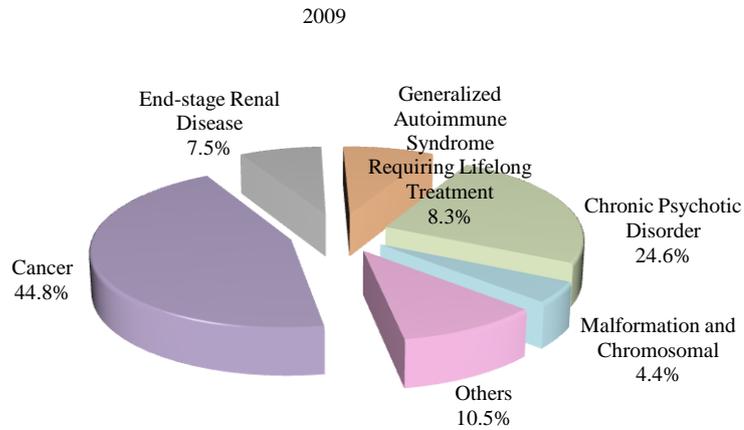
The inpatient medical expenses were 9 billion RVU for age 0-14, 35 billion RVU for 15-44, 48 billion RVU for 45-64, and 72 billion RVU for 65 and over in 2009.

**V. Medical Utilization of Major Illness/Injury**

**The number of major illness/injury certificates issued in 2009 was twice the number issued in 1999.**

At the end of 2009, there were 30 categories of major illness/injury; the number of valid Major Illness/ Injury Certificates issued was 831,033, showing an increase of 40,413 from the end of the previous year or 5.1%. Cancer patients held the highest number at 372,154 (44.8%), followed by chronic psychotic disorder patients at 204,079 (24.6%) and patients with generalized autoimmune syndrome requiring lifelong treatments at 68,916 (8.3%). Compared to the data at the end of 1999, the number of valid Major Illness/ Injury Certificates issued doubled.

Figure 47 Numbers of Valid Major Illness/ Injury Certificates Issued



At the end of 2009, the number of valid Major Illness/ Injury Certificates issued was 831,033 .

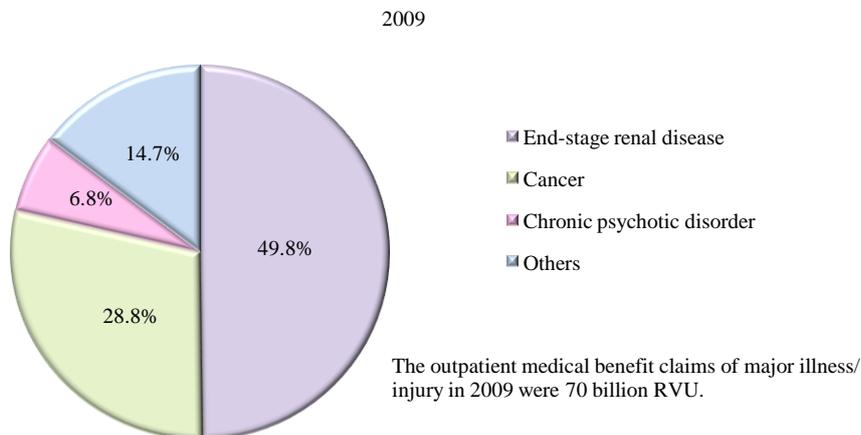
### 1. Outpatient Services

**(1) End-stage renal diseases accounted for approximately 50% of the outpatient medical benefit claims of major illness/ injury.**

The outpatient medical benefit claims of major illnesses/injury were 70 billion RVU in 2009, an increase of 5 billion RVU or 6.9% from the previous year. Compared with 2004, medical benefit claims increased by 23 billion RVU. The average annual increase was 8.3% in the past 5 years.

The top three claims were end-stage renal disease, amounted to 35 billion RVU (49.8%), cancer, 20 billion RVU (28.8%), and chronic psychotic disorder, 4.7 billion RVU (6.8%).

Figure 48 Outpatient Medical Benefit Claims of Major Illness/Injury



**(2) Congenital coagulation disorder had the highest outpatient medical benefit claims of major illness/injury per capita.**

Congenital coagulation disorder (hemophilia) had the highest outpatient medical benefit claims of major illness/injury per capita in 2009 at 2,286,797 RVU, followed by end-stage renal disease at 537,287 RVU, organ transplants at 207,578 RVU, multiple sclerosis at 187,651 RVU and Severe hemolytic and hypoplastic anemia at 160,820 RVU, accounting for 23.5x, 5.5x, 2.1x, 1.9x, and 1.7x respectively of the outpatient medical benefit claims of illness/injury per capita, 97,385 RVU.

Top Ten Outpatient Major Illness/Injury  
Medical Benefit Claims vs. Medical Benefit Claims per Capita

Medical benefit claims (million RVU)		Medical benefit claims per capita (RVU)	
End-stage renal disease	34,643	Congenital coagulation disorder	2,286,797
Cancer	20,025	End- stage renal disease	537,287
Chronic psychotic disorder	4,699	Organ transplants	207,578
Generalized autoimmune syndrome	2,597	Multiple sclerosis	187,651
Congenital abnormality of coagulation factors	2,104	Severe hemolytic and hypoplastic anemia	160,820
Organ transplants	1,337	Severe malnutrition	115,038
Congenital metabolic disease	1,096	Dependence on respirator	112,497
Dependence on respirator	460	Congenital immunodeficiency	105,253
Malformation and chromosomal abnormalities	411	Rare diseases	105,146
Cirrhosis of liver	355	Congenital metabolic disease	102,891

**(3) Top three outpatient major illnesses/injuries were the same for both genders.**

Outpatient medical benefit claims of major illness/injury in 2009 were 35 billion RVU for males and 35 billion RVU for females. The highest amounts for both genders were end-of stage renal diseases (47.2% for males and 52.4% for females), followed by cancer requiring long-term treatment or aggressive treatments (29.6% for males and 27.9% for females), and chronic psychotic disorder (6.7% for males and 6.8% for females).

2009 Outpatient Medical Benefit Claims for Top Ten Major Illness/Injury by Gender

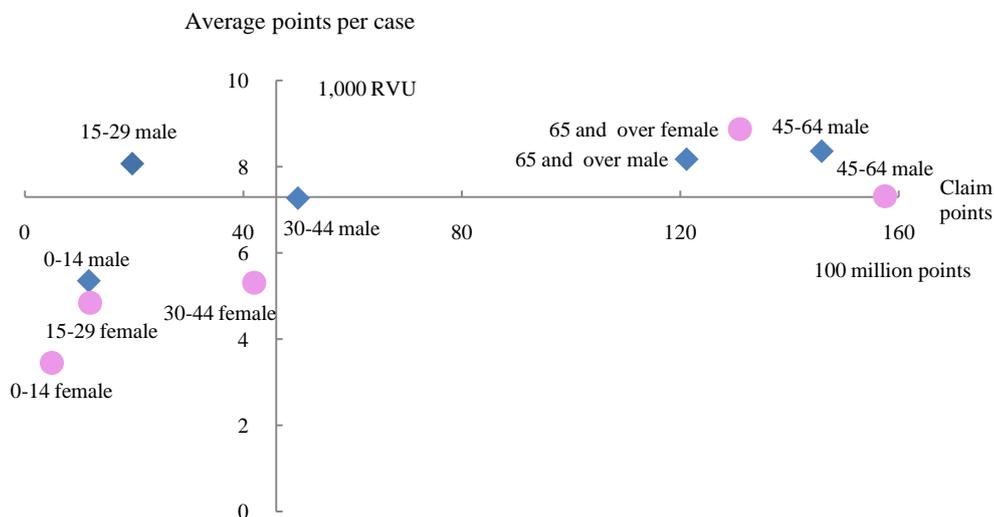
Male	%	Female	%
End-stage renal disease	47.2	End-stage renal disease	52.4
Cancer	29.6	Cancer	27.9
Chronic psychotic disorder	6.7	Chronic psychotic disorder	6.8
Congenital abnormality of coagulation factors	6.0	Generalized autoimmune syndrome	6.2
Organ transplants	2.4	Organ transplants	1.5
Congenital metabolic disease	1.9	Metabolic disorder	1.2
Generalized autoimmune syndrome	1.3	Malformation	0.7
Cirrhosis of liver	0.7	Respiratory failure requiring long-term respirator use	0.6
Dependence on respirator	0.7	Rare disease	0.5
Poliomyelitis, Cerebral Palsy, and Neurological, Muscular, Skeletal, Pulmonary Complications in Premature Infants	0.5	Hemolytic disease	0.4

**(4) Age 45-64 account for 44% of outpatient medical claims for major illness/injury.**

The outpatient medical benefit claims of major illness/injury were 2 billion RVU for age 0-14 age group (1.7% for males and 0.7% for females), 3 billion RVU for age 15-29 (2.8% for males and 1.7% for females), 9 billion RVU for age 30-44 (7.2% for males and 6.0% for females), 30 billion RVU for age 45-64 (21.0% for males and 22.6% for females) and 25 billion RVU for 65 and over (17.4% for males and 18.8% for females).

For the average points of major illness/injury filed per case, females had higher points than males for age 65 and over, while males had higher points than females for other age groups.

Figure 49 Outpatient Medical Benefit Claims of Major Illness/Injury by Gender and Age 2009



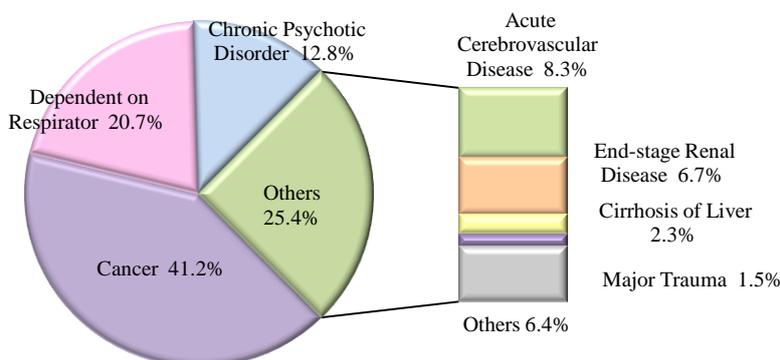
## 2. Inpatient Services

### (1) Cancer accounted for approximately 40% of inpatient medical benefit claims for major illness/ injury.

The inpatient medical benefit claims of major illnesses/ injury in 2009 were 68 billion RVU, increasing by 4.7% from the previous year. The highest amount came from patients with cancer that required aggressive or long-term treatments at 28 billion RVU (41.2%), followed by respirator-dependent patients at 14 billion RVU (20.7%) and patients with chronic psychotic disorder at 9 billion RVU (12.8%). Compared to 2004, inpatient medical benefit claims of major/injury increased by 10 billion RVU, with an average annual increase of 3.1%.

Figure 50 Inpatient Medical Benefit Claims of Major Illness/ Injury

2009



The inpatient medical benefit claims of major illnesses/ injury were 68 billion RVU in 2009.

### (2) Congenital coagulation disorders ranked the highest in inpatient medical benefit claims of major illness/injury per capita.

Congenital coagulation disorder had the highest inpatient medical benefit claims of major illness/injury per capita in 2009 at 1,673,931 RVU, followed by dependence on respirator at 759,119 RVU, complications in premature infants at 715,216 RVU, burns at 579,819 RVU and malnutrition at 553,977 RVU, accounting for 7.2x, 3.2x, 3.1x, 2.5x, and 2.4x respectively of the inpatient medical benefit claims of major illness/injury per capita, 233,875 RVU.

Top Ten Inpatient Major Illness/Injury  
Medical Benefit Claims vs. Medical Benefit Claims per Capita

Medical benefit claims (million RVU)		Medical benefit claims per capita (million RVU)	
Cancer	28,110	Congenital coagulation disorders (hemophilia)	1,673,931
Dependence on respirator	14,153	Dependence on respirator	759,119
Chronic psychotic disorder	8,740	Complications of premature infants	715,216
Acute cerebrovascular disease	5,667	Burns	579,819
End-stage renal disease	4,597	Malnutrition	553,977
Cirrhosis of liver	1,574	Creutzfeldt Jakob disease	531,819
Major trauma	1,009	Motor neuron disease	462,256
Generalized Autoimmune Syndrome	909	Hemolytic disease	386,973
Malformation and chromosomal abnormalities	855	Major trauma	287,374
Organ transplants	485	Generalized Autoimmune Syndrome	269,710

**(3) The top three major illnesses/injuries accounted for 75% of inpatient medical benefit claims for both genders.**

2009 Inpatient Medical Benefit Claims for Top Ten Major Illness/Injury by Gender

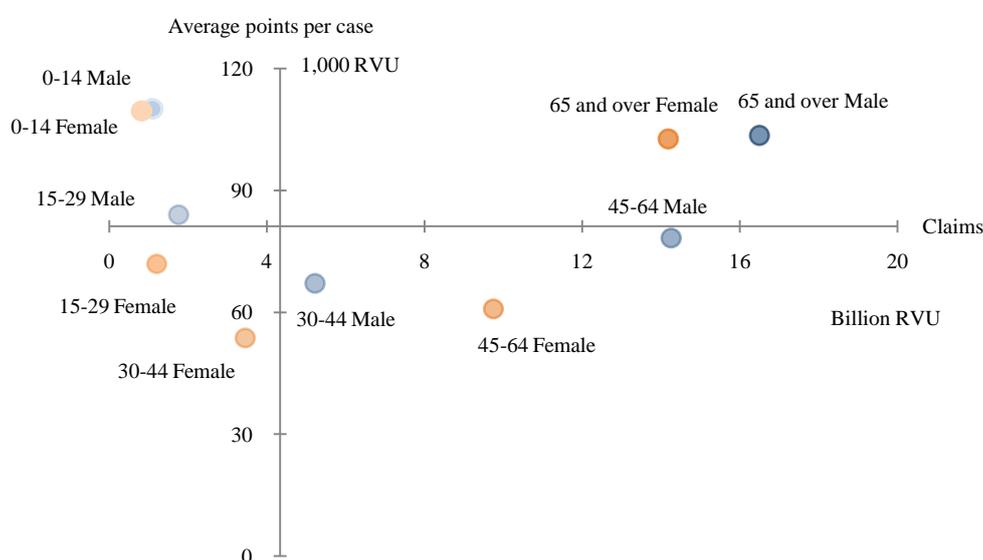
Male	Share	Female	Share
Cancer	42.6	Cancer	39.3
Dependence on respirator	20.0	Dependence on respirator	21.7
Chronic psychotic disorder	12.5	Chronic psychotic disorder	13.3
Acute cerebrovascular disease	8.4	End-stage renal disease	8.3
End-stage renal disease	5.5	Acute cerebrovascular disease	8.2
Cirrhosis of liver	2.9	Generalized autoimmune syndrome	2.4
Major trauma	1.9	Cirrhosis of liver	1.5
Malformation and chromosomal abnormalities	1.1	Malformation and chromosomal abnormalities	1.4
Organ transplants	0.8	Major trauma	0.9
Spinal injury or myelenterosis	0.8	Organ transplant	0.6

Inpatient medical benefit claims of major illness/injury in 2009 were 39 billion RVU for males and 29 billion RVU for females. The highest amount for both genders was cancer requiring long-term or aggressive treatments (42.6% for males, 39.3% for females), followed by dependence on respirator (20.0% for males, 21.7% for females), and chronic psychotic disorder (12.5% for males, 13.3% for females). Inpatient medical benefit claims for the top three illnesses/injuries accounted for 75% approximately for both genders.

**(4) Age 65 and over accounted for 45% of inpatient medical benefit claims for major illness/injury.**

In 2009, inpatient medical benefit claims of major illness/injury for age 0-14 was 2.8%, 15-29 4.4%, 30-44 12.7%, 45-64 35.2%, and age 65 and over 45.0%. For the average points of major illness/injury filed per case, there was no significant difference between males and females for age 0-14 and 65 and over groups; while males had higher points than females for other age groups.

Figure 51 Inpatient Medical Benefit Claims of Major Illness/ Injury by Gender and Age



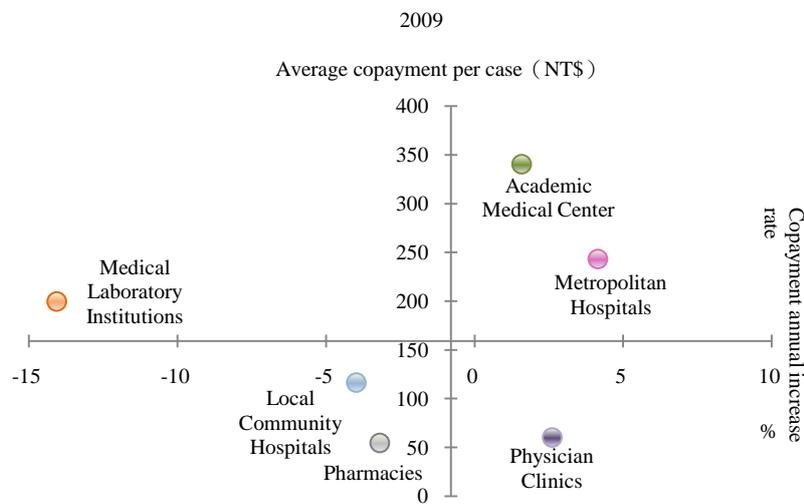
## VI. Medical Expense Copayment

### (1) Outpatient Services

**Outpatient copayment increased by 2.1% from the previous year.**

The outpatient copayment was 27,506 million in 2009. Physician clinics had the highest amount in total copayment (46.7%), followed by metropolitan hospitals (23.0%) and academic medical centers (20.2%). Compared to the previous year, outpatient copayment increased by 2.1%; metropolitan hospitals showed the biggest increase at 4.2%, followed by physician clinics at 2.6% and academic medical centers at 1.6%; local community hospitals showed the biggest drop at 4.0%. Outpatient average copayment per case was highest for academic medical centers at NT\$340, followed by metropolitan hospitals at NT\$243 and medical laboratory institutions at NT\$200.

Figure 52 Outpatient Copayment

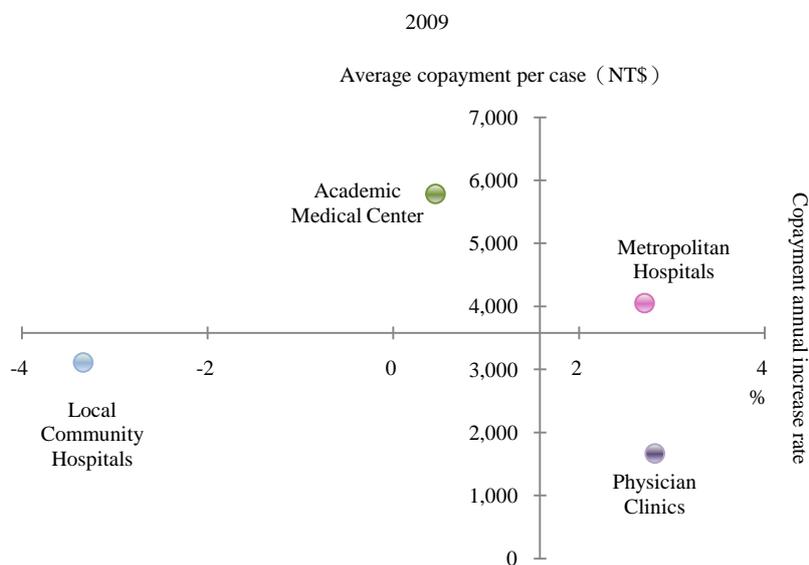


(2) Inpatient Services

**Inpatient copayment increased by 0.9% from the previous year.**

The inpatient copayment was 6,969 million in 2009. Metropolitan hospitals had the highest amount in total copayment (43.8%), followed by academic medical centers (41.8%) and local community hospitals (14.3%). Compared to the previous year, inpatient copayment increased by 0.9%; physician clinics showed the biggest increase at 2.8%, followed by metropolitan hospitals at 2.7%; local community hospitals showed the biggest drop at 3.3%. Inpatient average copayment per case was highest for academic medical centers at NT\$5,781, followed by metropolitan hospitals at NT\$4,050 and local community hospitals at NT\$3,109.

Figure 53 Inpatient Copayment



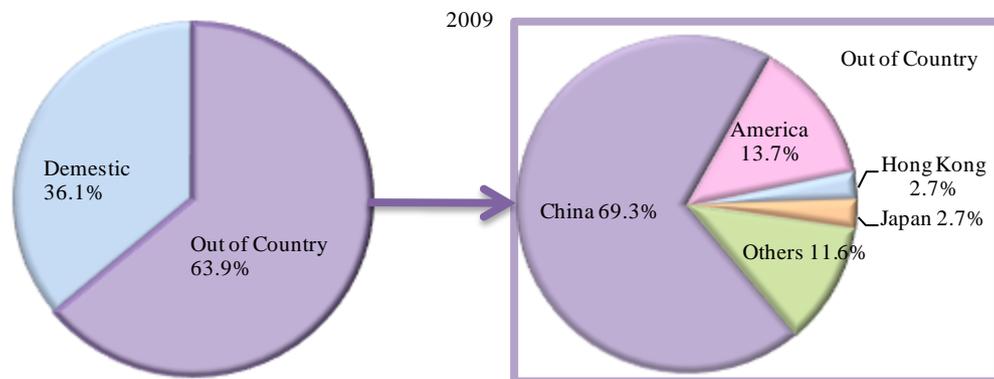
## VII. Reimbursement of Advance Medical Expenses for Out-of-Plan Services

### 1. Reimbursement of advance medical expenses increased in areas outside the country.

A total of NT\$1,363 million of reimbursement for out-of-plan services was filed in 2009, an increase of 1.8% from the previous year; NT\$502 million was approved, an increase of 3.8% from the previous year. NT\$295 million was filed for outpatient services, increased by 0.7%, 53.3% of which was approved; NT\$1,069 million was filed for inpatient services, increased by 2.1%, 32.3% of which was approved.

Broken down by area, domestic area claims was NT\$522 million, showing a decrease of 0.1% from the previous year, 34.7% of which was approved. Out-of-country area claims was NT\$817 million, showing an increase of 3.0% from the previous year; 38.1% of which was approved. Claims from China and the United States accounted for 83% of reimbursement for out-of-country claims.

Figure 54 Reimbursement of Advance Medical Expenses for Out-of-Plan Services

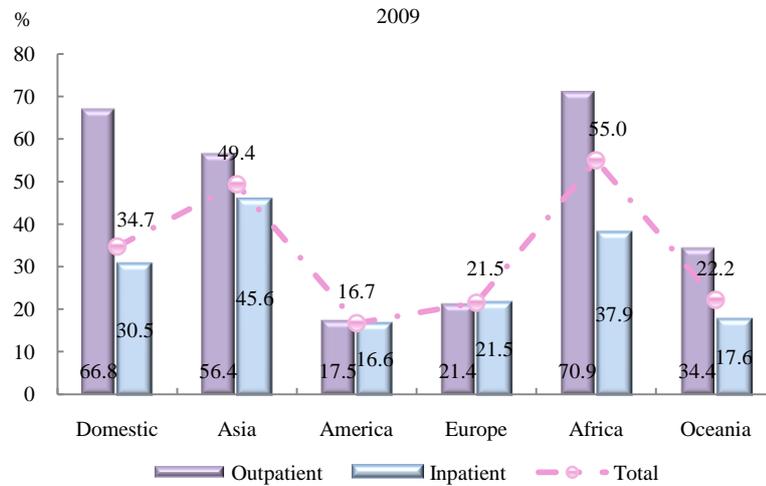


A total of NT\$502 million was approved for reimbursement of advance medical expenses for out-of-plan services.

### 2. Approval rates for reimbursements for out-of-plan services were slightly higher for out of country.

Approval rate for medical expense reimbursements for out-of-plan services was 36.8% in 2009; 53.3% for outpatient services and 32.3% for inpatient services. Broken down by areas, approval rate was 34.7% for domestic areas and 38.1% for out of country areas (Africa 55.0%, Asia 49.4%, Oceania 22.2%, Europe 21.5%, and North America 16.7%).

Figure 55 Approval rates for reimbursements for out-of-plan services



Notes:

1. Data in this chapter was last updated on June 31, 2010.
2. The medical benefit claims in this chapter do not include copayment
3. The detailed medical expenses in this chapter include the medical benefit claims and copayment.
4. Patients' copayment does not include registration fees.
5. Prior to the implementation of the global budget payment system, 1 RVU was equal to NT\$ 1. After the global budget payment system was implemented, 1 RVU for any item under general services should be calculated according to the Point Value of Global Budget Payment System in this chapter. For other items, 1 RVU was equal to NT\$ 1 in principle.
6. For reimbursement of advance medical expenses for out-of-plan services, only cases whose amount approved were larger than zero were accumulated for the figures of approved cases.