

## 4. Medical Benefits

The medical benefits under the NHI system are mainly paid on basis of service volume. The system is supported by the global budget payment system to achieve comprehensive control of medical expenses. The global budget payment system was implemented in July 1998 on a staged basis starting from the outpatient services for dentistry, followed by Chinese medicine outpatient services and physician clinics. In July 2002, the hospital global budget payment system was implemented as well. To effectively control the growth of medical expenses and increase the accountability of the medical service providers, BNHI further enforced in 1997 the “Case Payment” system on certain selected surgery items which were relatively simple and could be easily standardized. Furthermore, to elevate the quality of healthcare services, BNHI also commenced in 2000 the pilot project of the “Pay for Performance” system and gradually introduced the DRG system for inpatient services since 2010. The integrated outpatient healthcare program, in the meantime, has been continuously facilitated to improve the effectiveness of the healthcare services.

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.

## (1) Medical Benefit Claims (Copayments Excluded)

**The average annual increase of medical claims in the most recent decade was 5.4%.**

The total medical benefit claims in 2011 amounted to 526 billion RVU, marking an increase of 5.1% from the previous year and 68.8% from 2001. The average annual increase in the most recent decade was 5.4%. Total 378 million claims were filed, an increase of 19.4% from 2001. The average annual increase was 1.8%.

### i. Outpatient Service

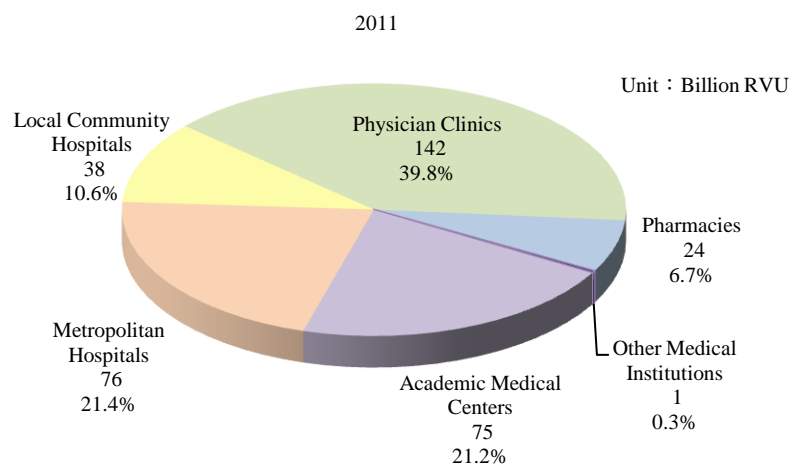
There were a total of 375 million outpatient claims in 2011, an increase of 19.4% from 2001. The average annual increase was 1.8%. The total benefit claims were 356 billion RVU, a 72.1% increase from 2001. The average annual increase was 5.6%. The average points per case were 950 RVU in 2011.

#### a. Broken down by contracted category, academic medical centers showed the highest average RVU per case.

Broken down by contracted category, the benefit claims for outpatient services rendered in 2011 were, respectively, 142 billion RVU or 39.8% for physician clinics, 76 billion RVU or 21.4% for metropolitan hospitals, 76 billion RVU for academic medical centers or 21.2%, 38 billion RVU for local community hospitals, 24 billion RVU for pharmacies and 1 billion RVU for other medical institutions.

The average points per outpatient case were, in descending order, 2,212 RVU for academic medical centers, 1,649 RVU for metropolitan hospitals, 1,229 RVU for local community hospitals, 537 RVU for physician clinics, 406 RVU for other medical institutions and 321 RVU for pharmacies.

Figure 30 Outpatient Medical Benefit Claims

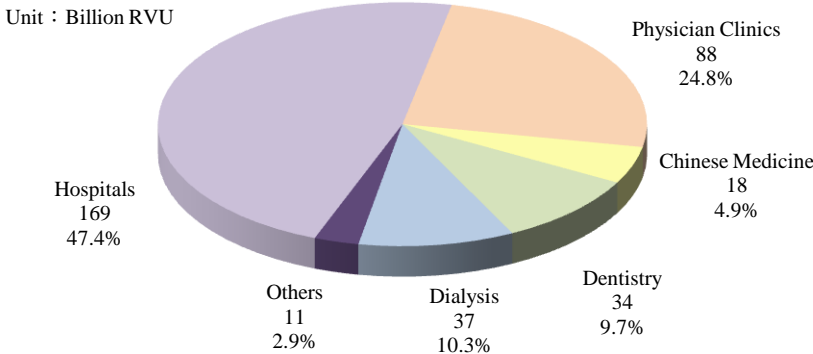


**b. Broken down by the global budget payment system, the average points per dialysis case were 47,094 RVU, being the highest of all.**

Broken down by the global budget payment system, the outpatient benefits claimed by hospitals in 2011 were 169 billion RVU (47.4%), followed by physician clinics at 88 billion RVU (24.8%). The outpatient claims by the Chinese medicine, dentistry and dialysis were, respectively, 18 billion RVU, 34 billion RVU and 37 billion RVU, which, on a combined basis, accounted for about 25% of all.

The average points per case were 47,094 RVU for dialysis, being the highest of all. It was followed by hospitals at 1,699 RVU, dentistry at 1,127 RVU, Chinese medicine at 460 RVU and physician clinics at 459 RVU.

Figure 31 Outpatient Medical Benefit Claims by Global Budget Payment System  
2011

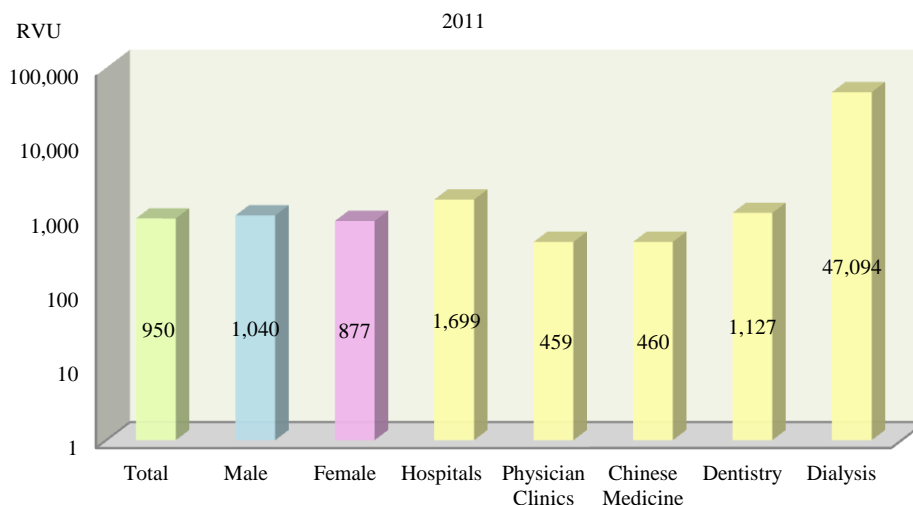


**c. Benefits claimed by females were slightly higher than that by males. In terms of the average RVU per case, however, males had a higher amount than females.**

In 2011, outpatient claims were 174 billion RVU (48.8%) by males and 182 billion RVU (51.2%) for females. Broken down by the global budget payment system, females have claimed a higher amount than males in all categories except for hospitals. The most significant difference was found in the category of Chinese medicine, where the claims from females were 1.6 times of those from the males.

The average points per outpatient case were 1,040 RVU for males and 877 RVU for females.

Figure 32 Outpatient Medical Benefit Claims per Case by Global Budget Payment System and Gender



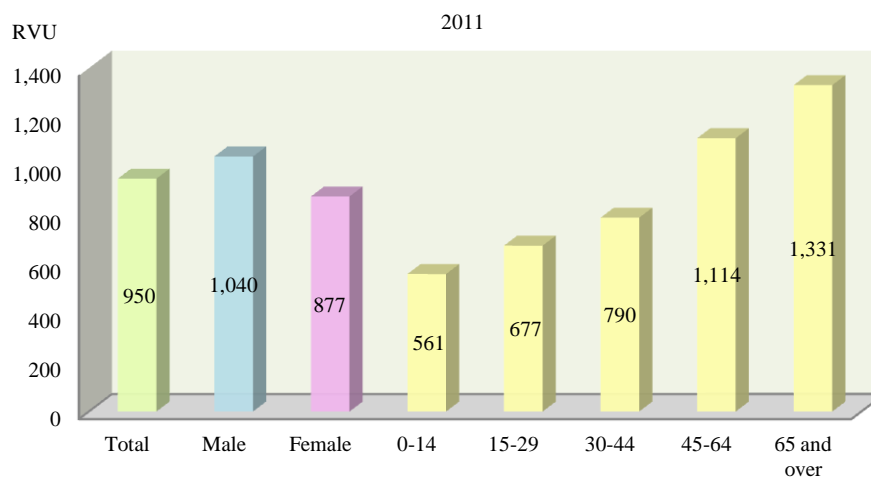
The outpatient medical claims were 174 billion RVU for male and 182 billion RVU for female in 2011.

**d. Average RVU per case increased with age.**

Broken down by age group, the outpatient claims from the 45–64 group in 2011 accounted for 35.9% of all, being the highest. It was followed by the group of 65 and above, being 29.0%. The group of 30–44 represented 16.0% of all. The group of 15–29 accounted for 9.7%. The group of 0–14 only accounted for 9.3%, being the lowest of all.

The average RVU per outpatient case increased with age. They were 561 RVU for the 0–14 group, 677 RVU for the 15–29 group, 790 RVU for the 30–44 group, 1,114 RVU for the 45–64 group and 1,331 RVU for the 65 and above group.

Figure 33 Outpatient Medical Benefit Claims per Case by Gender and Age



The outpatient medical benefit claims were 174 billion RVU for male and 182 billion RVU for female in 2011.

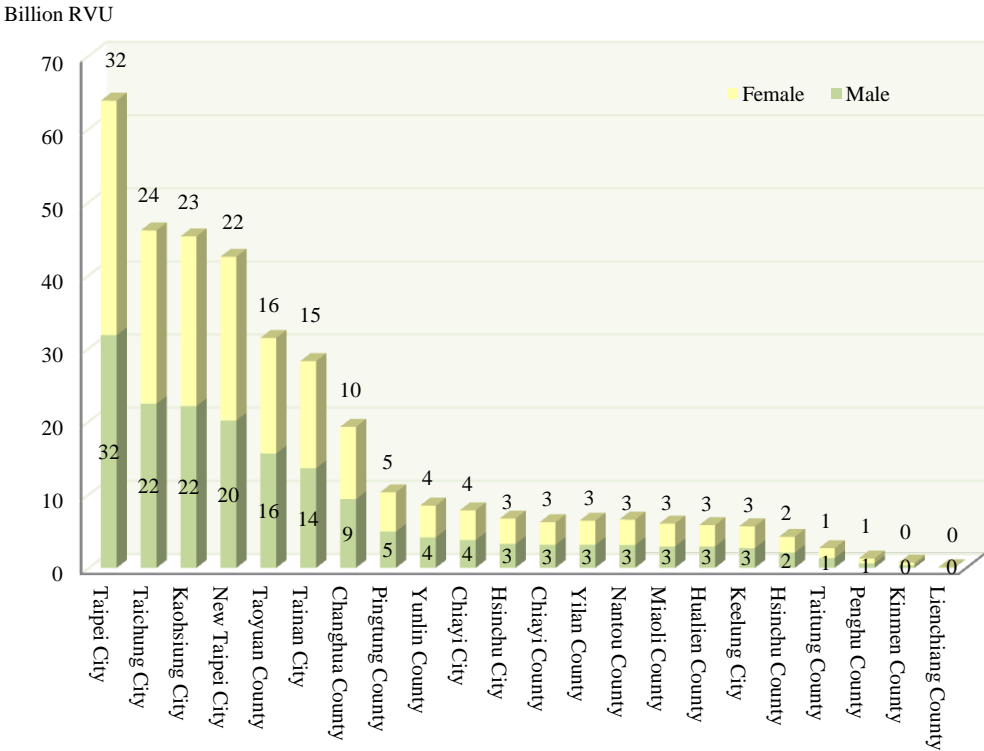
**e. In terms of the average RVU per case, males had a higher amount than females in all locales.**

In 2011, the total outpatient claims filed in Taipei City amounted for 64 billion RVU (17.9%), being the highest of all, followed by Taichung City at 46 billion RVU (13.0%), Kaohsiung City at 45 billion RVU (12.7%) and the New Taipei City at 43 billion RVU (11.9%). The total medical benefits claimed by the five municipalities and the quasi-special municipality, Taoyuan County, accounted for more than 70% of all the benefit claimed.

Analyzed by gender, females claimed a higher amount of outpatient benefits than males. Chiayi and Kinmen counties were the only two locales where males claimed a higher RVU than females. In terms of the average RVU per case, males had a higher amount than females in all locales.

In terms of age group, the group of 65 and above accounted for the largest proportion of outpatient claims in Ilan, Miaoli, Nantou, Yunlin and Chiayi counties. In other locales, it was the group of 45–64 that had the highest claim amount.

Figure 34 Outpatient Medical Benefit Claims by Gender and Locale  
2011



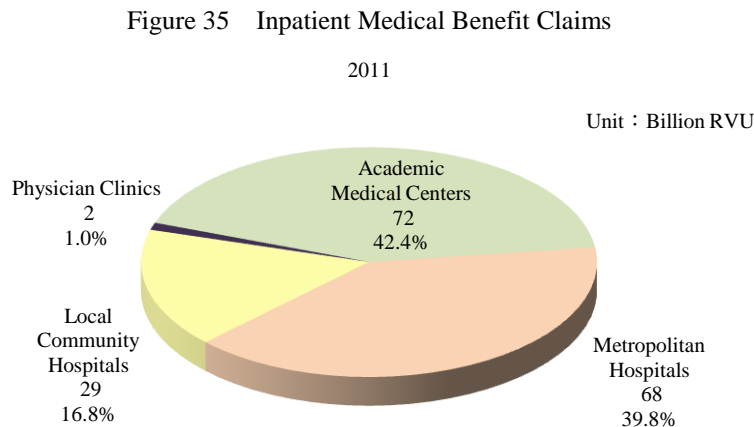
## ii. Inpatient Service

A total of 3 million of inpatient claims were filed in 2011, an increase of 16.4% from 2001. The average annual increase in the most recent decade was 1.5%. The total benefit claims were 170 billion RVU, a 62.3% increase from 2001. The average annual increase in the most recent decade was 5.0%. The average points per case were 51,809 RVU.

### a. Academic medical centers showed the highest average RVU per case.

Broken down by the contracted category, academic medical centers claimed 72 billion RVU (42.4%) for inpatient services rendered in 2011; metropolitan hospitals 68 billion RVU (39.8%), local community hospitals 29 billion RVU (16.8%) and physician clinics 2 billion RVU (1.0%)

With regard to the average RVU per inpatient case, the highest claim was seen from academic medical centers at 67,955 RVU, followed by metropolitan hospitals at 45,038 RVU, local community hospitals at 43,383 RVU and physician clinics at 28,618 RVU.

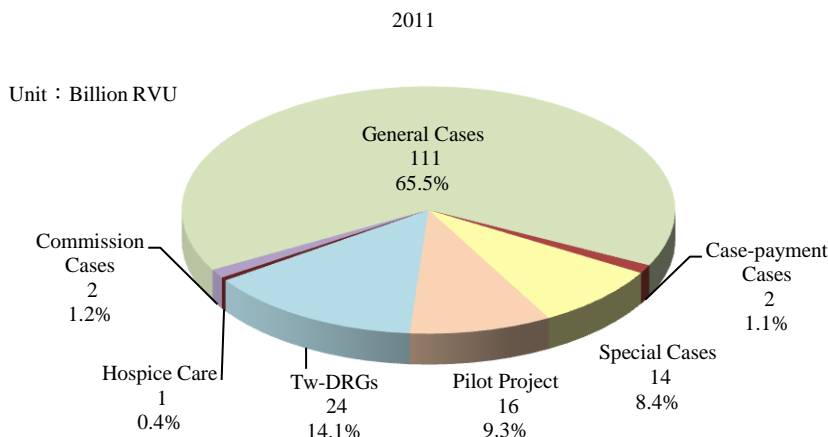


### b. Medical claims from general cases represented the largest proportion of all.

Analyzed by case type, the total inpatient claims from general cases in 2011 amounted to 111 billion RVU, being 65.5% and the highest of all. Among the other categories, the highest case type was the Tw-DRGs which amounted to 24 billion RVU, followed by pilot projects at 16 billion RVU and special cases at 14 billion RVU.

The average points per case for special case were 368,623 RVU, being the highest of all. It was followed by pilot projects at 161,484 RVU, hospice care at 56,407 RVU, Tw-DRGs at 50,545 RVU, general cases at 44,825 RVU and case payments at 29,638 RVU.

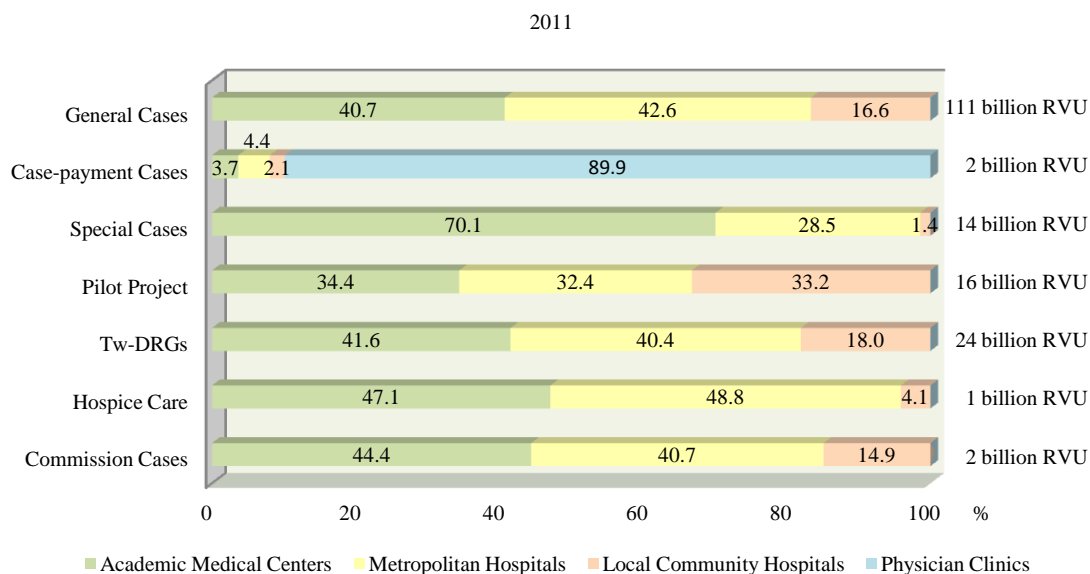
Figure 36 Inpatient Medical Benefit Claims by Type of Case



**c. Medical claims from physician clinics represented 90% of the case payments.**

Broken down by contracted category, academic medical centers and metropolitan hospitals respectively contributed to about 40% of the general inpatient cases in 2011. Physician clinics represented 90% of the case payments. 70% of the special cases were filed by academic medical centers. With regard to the pilot projects, academic medical centers, metropolitan hospitals and local community hospitals each contributed to one third of the total claims. Further, academic medical centers and metropolitan hospitals respectively represented about 40% of the Tw-DRGs cases. In terms of hospice care, academic medical centers and metropolitan hospitals each accounted for nearly 50% of the claims.

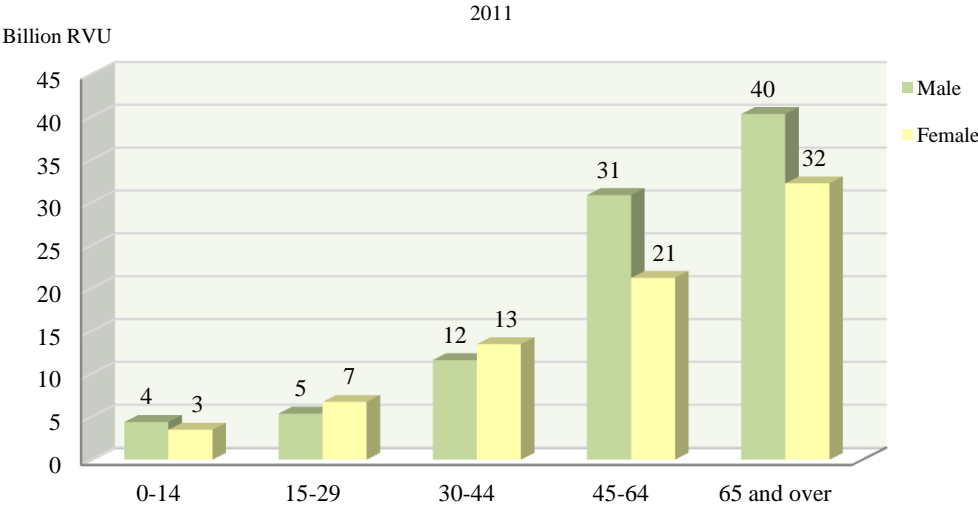
Figure 37 Inpatient Medical Benefit Claims by Type of Case and Contracted Category



**d. Medical claims increased with age.**

Analyzed by age group, the inpatient claims in 2011 increased with age. They were, respectively, 8 billion RVU (4.6%) for the 0–14 group, 12 billion RVU (7.1%) for the 15–29 group, 25 billion RVU (14.8%) for the 30–44 group, 52 billion RVU (30.7%) for the 45–64 group and 73 billion RVU (42.8%) for the 65 and above group. Males had a higher claim amount in the groups of 0–14, 45–64 and 65 and above; while females were higher in the groups of 15–29 and 30–44.

Figure 38 Inpatient Medical Benefit Claims by Gender and Age



**e. Males had a higher medical claim than females both in terms of total RVU and average RVU per case.**

In 2011, the inpatient claims filed in Taipei City amounted to 38 billion RVU (22.1%), being the highest of all, followed by Kaohsiung City at 23 billion RVU (13.6%), Taichung City at 22 billion RVU (13.2%) and Taoyuan County at 16 billion RVU (9.4%). The total medical benefits claimed by the five municipalities and the quasi-special municipality, Taoyuan County, accounted for more than 70% of all the benefit claimed.

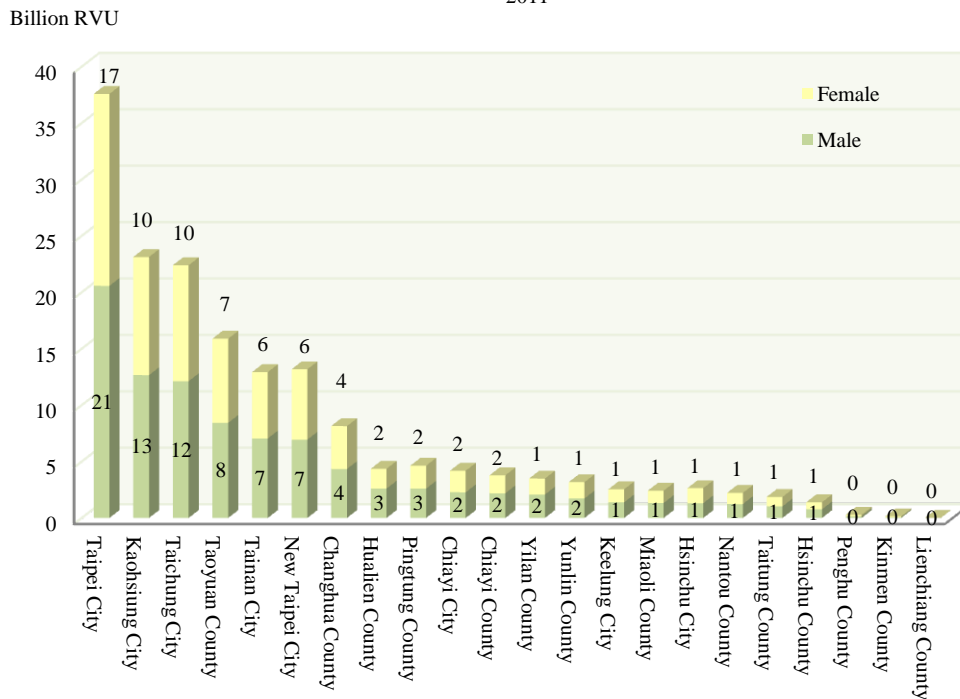
Analyzed by gender, males had higher inpatient claims than females. Kinmen county was the only locale where females had a higher inpatient claim than males. In terms of the average RVU per case, males had a higher RVU than females in all locales except Penghu County and Kinmen County.

Broken down by age group, the group of 65 and above accounted for the highest inpatient claims in all locales except Lienjiang County, where the group of 15–29 had the highest claim amount.



Figure 39 Inpatient Medical Benefit Claims by Gender and Locale

2011



## (2) Approved Medical Benefit Claims

In 2011, the total approved medical claims amounted to 516 billion RVU, a 5.6% increase from the previous year and 72% increase from 2001. The average annual increase in the most recent decade was 5.5%. The average approved points per case were 1,365 RVU.

The total approved medical expenses in 2011 was NT\$472 billion, a 2.8% increase from the previous year. The average annual increase in five years was 3.9%. The average payment per case was NT\$1,246.

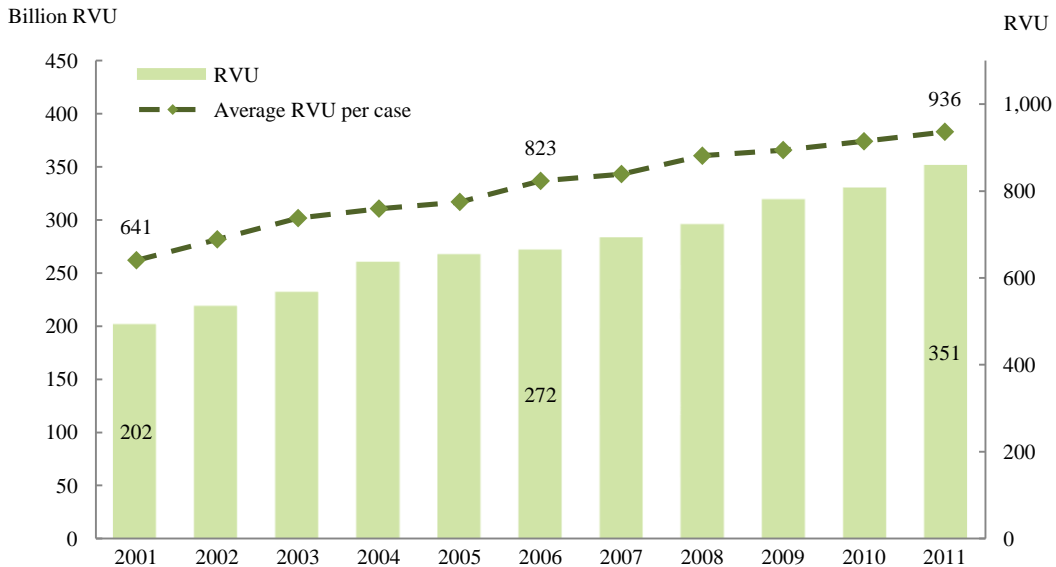
### i. Outpatient Service

**a. In terms of the approved RVU, the average annual increase in the most recent five years was 5.3%. In terms of the approved amount, the average annual increase was 4.5%.**

In 2011, the total approved medical claims amounted to 351 billion RVU, a 6.5% increase from the previous year and 74% increase from 2001. The average annual increase in the most recent decade was 5.3%. The average points per case were 936 RVU, an increase of 22 RVU from the previous year.

The total approved outpatient expenses in 2011 was NT\$322 billion, a 3.7% increase from the previous year. The average annual increase in five years was 4.5%. The average amount per approved case was NT\$859, a decrease of NT\$3 from the previous year.

Figure 40 Historical Approved Outpatient Medical Payments

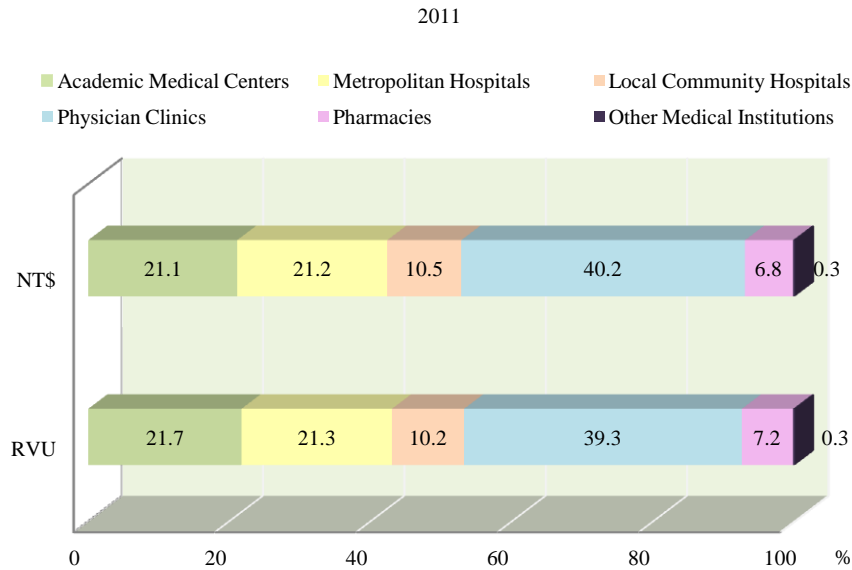


**b. In terms of approved RVU, the physician clinics had the highest amount of all. As for the average RVU per case, the highest amount was seen from the academic medical centers.**

Physician clinics had 141 billion RVU of outpatient claims approved in 2011, being the highest of all, followed by metropolitan hospitals at 75 billion RVU and academic medical centers at 74 billion RVU. As for the average RVU per approved case, academic medical centers had the highest amount of 2,169 RVU, followed by metropolitan hospitals at 1,610 RVU and local community hospitals at 1,202 RVU.

Analyzed by dollar amount, total outpatient expenses approved in 2011 for physician clinics were NT\$127 billion, being the highest of all. It was followed by academic medical centers at NT\$70 billion and metropolitan hospitals at NT\$69 billion. In terms of average amount per approved case, academic medical centers had the highest amount of 2,047 RVU, followed by metropolitan hospitals at 1,482 RVU and local community hospitals at 1,073 RVU.

Figure 41 Approved Outpatient Medical Payments by Contracted Category



The approved outpatient medical payments were 351 billion RVU or NT\$322 billion.

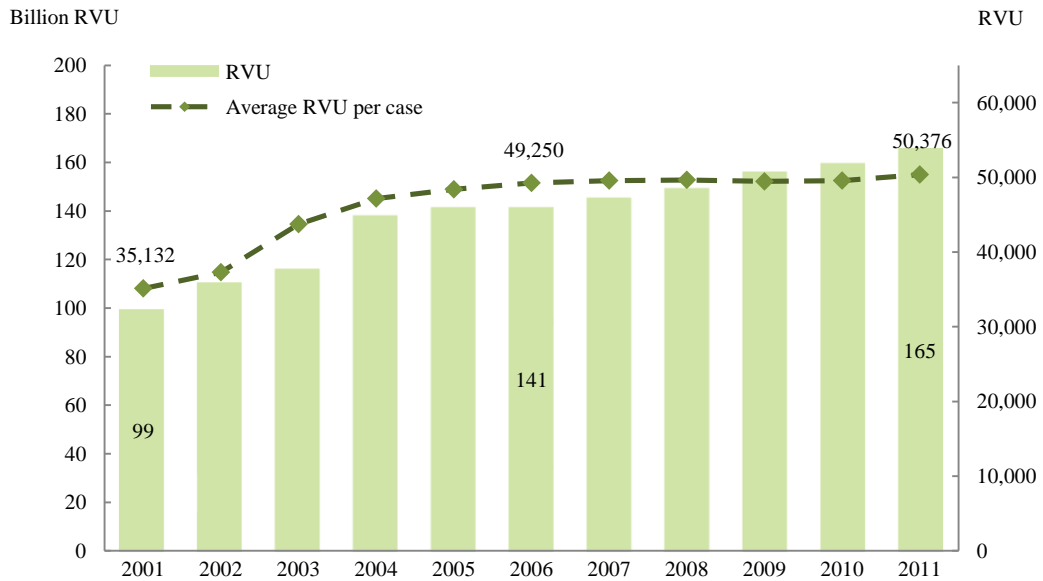
## ii. Inpatient Service

- a. In terms of the approved RVU, the average annual increase in the most recent five years was 3.2%. In terms of the approved amount, the average annual increase was 2.6%.**

In 2011, the total approved inpatient claims amounted to 165 billion RVU, a 3.9% increase from the previous year and 66% increase from 2001. The average annual increase in ten years was 3.2%. The average RVU per approved case was 50,376, an increase of 813 RVU from the previous year. The average length of stay was 10.15 days, a decrease of 0.06 day from the previous year. The average RVU per diem was 4,965, an increase of 110 RVU from the previous year.

The total approved inpatient claims in 2011 amounted to NT\$150 billion, a 0.9% increase from the previous year. The average annual increase in the most recent five years was 2.6%. The average amount per approved case was NT\$45,598, a decrease of NT\$570 from the previous year. The average cost per diem was NT\$4,494, a decrease of NT\$28 from the previous year.

Figure 42 Historical Approved Inpatient Medical Payments

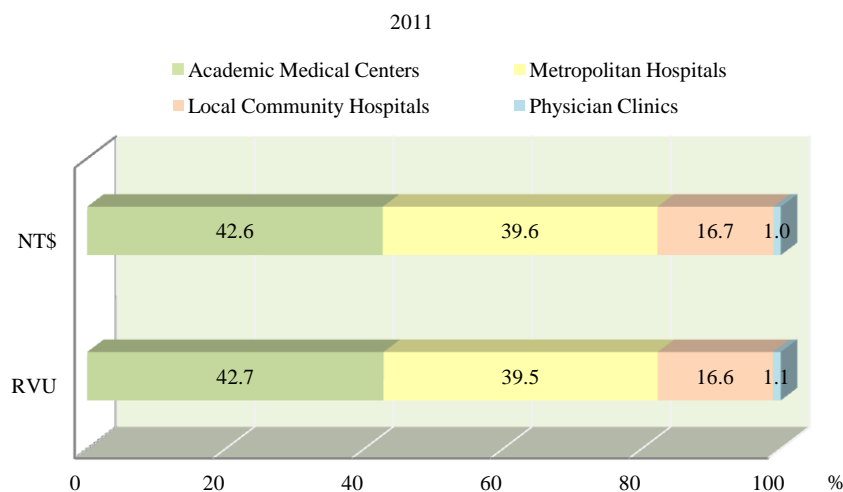


**b. Academic medical centers had the highest amount both in total RVU approved and average RVU per case.**

In 2011, the inpatient benefit claims approved for academic medical centers amounted to 70 billion RVU (42.7%), being the highest of all. It was followed by metropolitan hospitals at 65 billion RVU (39.5%), local community hospitals at 28 billion RVU and physician clinics at 2 billion RVU. In terms of average RVU per approved case, academic medical centers had the highest amount of 66,418 RVU, followed by metropolitan hospitals at 43,632 RVU and local community hospitals at 41,937 RVU.

Analyzed by dollar amount, the total inpatient claims approved in 2011 for academic medical centers amounted to NT\$64 billion, being the highest of all. It was followed by metropolitan hospitals at NT\$59 billion, local community hospitals at NT\$25 billion and physician clinics at NT\$2 billion. The academic medical centers had the highest average amount per case of NT\$60,292, followed by metropolitan hospitals at NT\$39,420, local community hospitals at NT\$37,605 and physician clinics at NT\$28,400.

Figure 43 Approved Inpatient Medical Payments by Contracted Category



The approved inpatient medical payments were 165 billion RVU or NT\$149 billion.

### (3) Medical Expenses (Copayments Included)

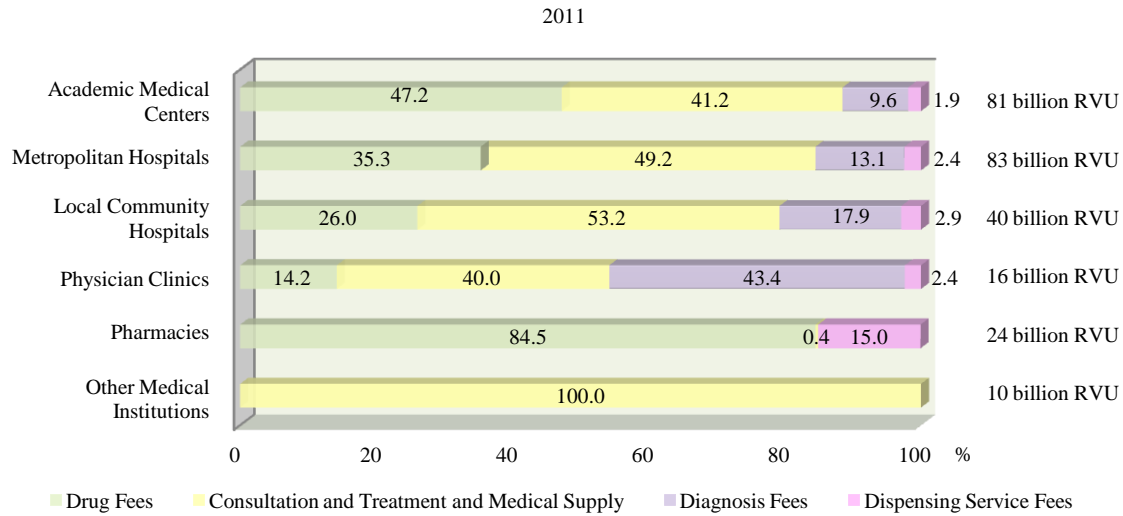
The total medical expenses (copayments included) in 2011 amounted to 559 billion RVU, of which outpatient expenses accounted for 385 billion RVU (68.9%), mainly used for consultation, treatment and medical supplies, followed by drug fees. Inpatient medical expenses amounted to 174 billion RVU (31.1%). They were mostly for ward fees, followed by drug fees and surgical fees.

#### i. Outpatient Service

##### a. Consultation, treatment and medical supplies accounted for the largest proportion of the medical expenses.

In 2011, the outpatient medical expenses for academic medical centers amounted to 81 billion RVU, of which drug fees accounted for the largest proportion. It was followed by the consultation, treatment and medical supply fees. Metropolitan and local community hospitals respectively had 83 billion RVU and 40 billion RVU. In both cases, consultation, treatment and medical supplies was the highest cost, followed by the drug fees. Physician clinics accounted for 155 billion RVU. Diagnosis fees was the highest cost, followed by the expenses for consultation, treatment and medical supplies.

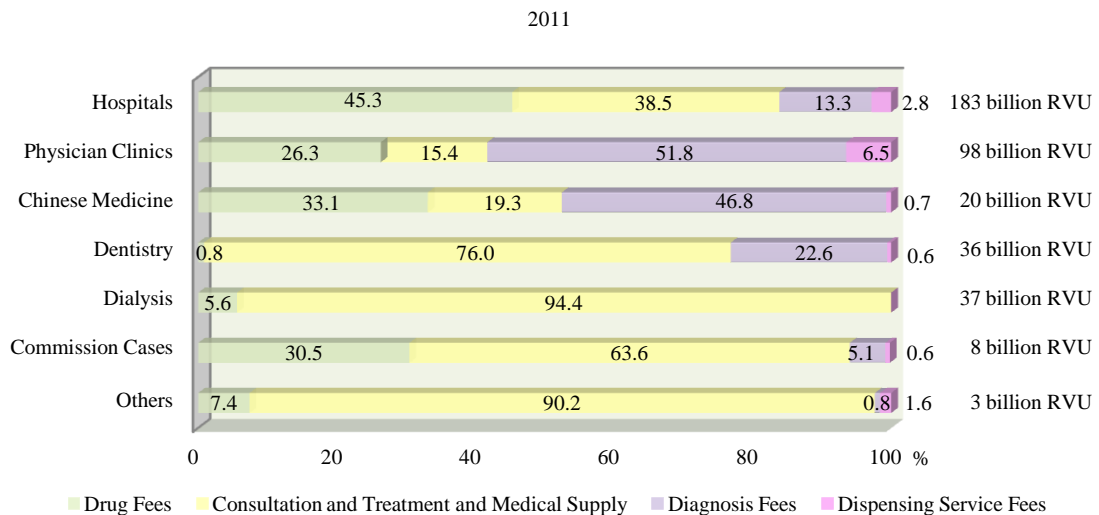
Figure 44 Detailed Outpatient Medical Expenses by Contracted Category



**b. Drug fees represented the largest proportion of expenses in hospitals. Diagnosis fees were the highest in both physician clinics and Chinese medicine.**

Broken down by the global budget payment system, outpatient expenses for hospitals in 2011 were 183 billion RVU. Drug fees were the highest cost, followed by the expenses for consultation, treatment and medical supplies. The physician clinics and Chinese medicine had 98 billion RVU and 20 billion RVU respectively. In both cases, diagnosis fees were the highest cost of all, followed by drug fees. The dentistry had 36 billion RVU. Consultation, treatment and medical supplies expenses were the highest cost, followed by diagnosis fees. Dialysis had a total expense of 37 billion RVU, of which the largest proportion was for consultation, treatment and medical supplies.

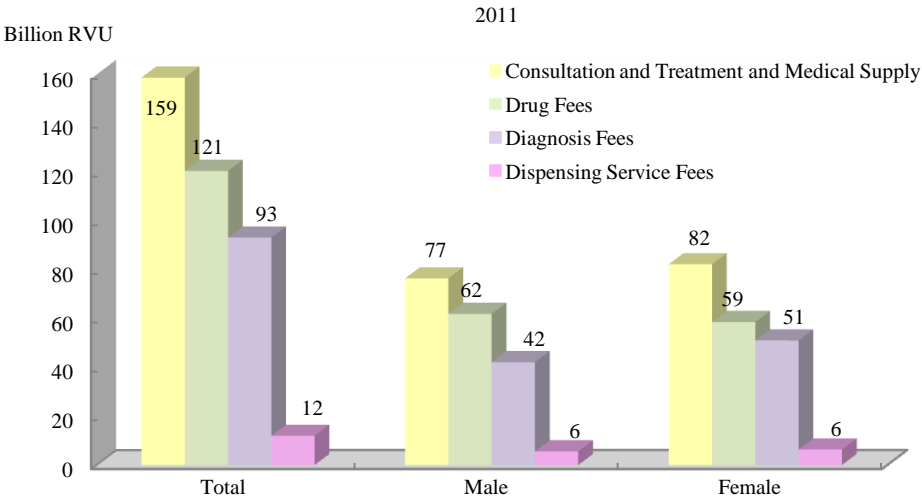
Figure 45 Detailed Outpatient Medical Expenses by Global Budget Payment System



**c. Females had higher medical expenses than males. For both genders, the largest proportion of the expense was for consultation, treatment and medical supplies.**

In 2011, the outpatient medical expenses amounted to 186 billion by males (48.4%) and 199 billion (51.6%) by female. Consultation, treatment and medical supplies accounted for the largest proportion of the expenses for both genders and drug fees the second.

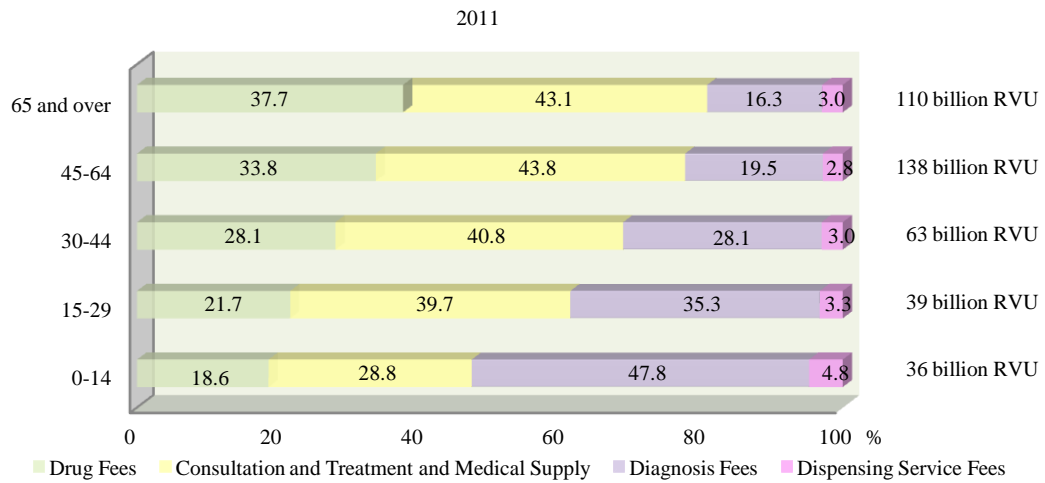
Figure 46 Detailed Outpatient Medical Expenses by Gender



**d. Consultation, treatment, and medical supplies represented the largest proportion of medical expenses in all age groups except the 0–14 group.**

In 2011, the outpatient expenses were 36 billion RVU (9.5%) for the 0–14 age group, 39 billion RVU (10.0%) for 15–29 group, 63 billion RVU (16.3%) for 30–44 group, 138 billion RVU (35.7%) for 45–64 group and 110 billion RVU (28.5%) for 65 and above group. For the 0–14 group, diagnosis fees accounted for the largest proportion of expenses, followed by consultation, treatment and medical supplies expenses. For the 15–29 group, the consultation, treatment and medical supplies accounted for the highest percentage of the expenses, followed by diagnosis fees. In all other age groups, the largest proportion of the expenses was for consultation, treatment and medical supplies, followed by drug fees.

Figure 47 Detailed Outpatient Medical Expenses by Age

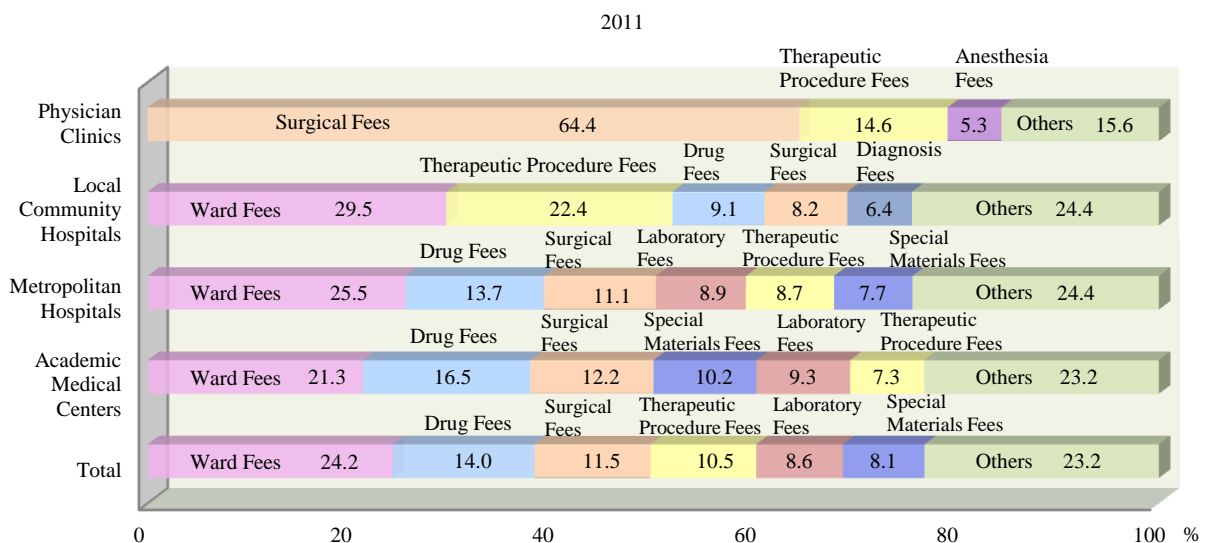


## ii. Inpatient Service

### a. Ward fees accounted for the largest portion of inpatient expenses, followed by drug fees.

In 2011, inpatient expenses for academic medical centers and metropolitan hospitals were 74 billion RVU and 70 billion RVU respectively. The highest cost in both categories was ward fees, followed by drug fees and surgical fees. The inpatient expenses for local community hospitals amounted to 29 billion RVU. The highest cost was ward fees, followed by therapeutic procedure fees and drug fees. For physician clinics, the total expense amounted to 1 billion RVU, of which the highest cost was surgical fees, followed by therapeutic procedure fees and anesthesia fees.

Figure 48 Detailed Inpatient Medical Expenses by Contracted Category



Inpatient medical expenses were 74 billion RVU for academic medical centers, 70 billion RVU for metropolitan hospitals, 29 billion RVU for local community hospitals and 1 billion RVU for physician clinics in 2011.



**b. In all types of cases, the top 3 medical expenses contributed to more than 50% of the total.**

Broken down by type of case, ward fees accounted for the highest percentage for general cases, followed by drug fees and laboratory fees. For case payments, surgical fees showed the highest percentage; therapeutic procedure fees the second and anesthesia fees the third. For special cases, the highest percentage was seen from ward fees. The second and third were, respectively, special materials fees and drug fees. For pilot projects, therapeutic procedure fees accounted for the largest proportion of expenses, followed by ward fees and drug fees. In the category of hospice care, the highest expense was ward fees. Drug fees were the second and therapeutic procedure fees the third. In terms of Tw-DRGs cases, the highest expense was seen from surgical fees, which was followed by special materials fees and ward fees. Ward fees ranked the highest in commission cases; surgical fees the second and tube feeding fees the third.

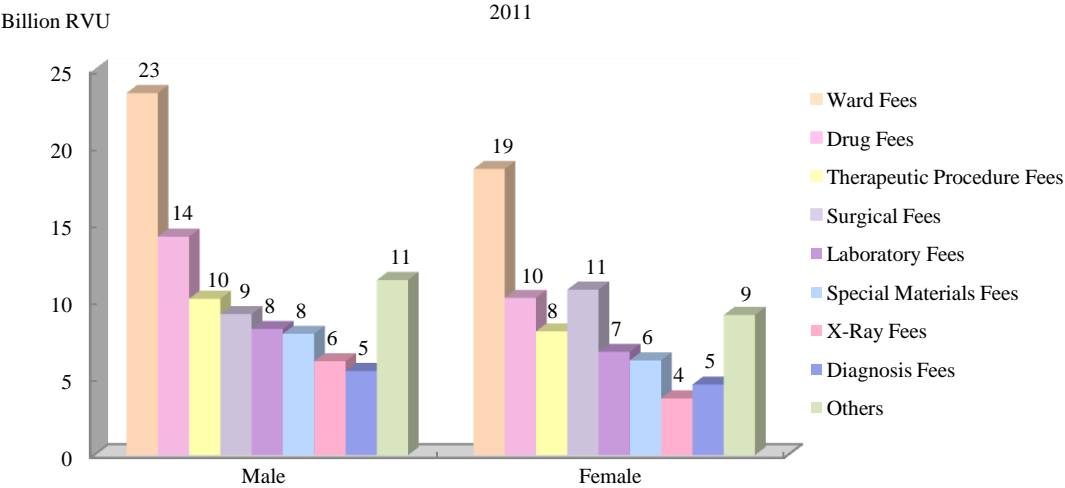
Table1 Top 5 Detailed Inpatient Medical Expenses by Type of Case in 2011

General Cases 117 billion RVU	Case-Payment 1 billion RVU	Special Cases 15 billion RVU	Pilot Project 16 billion RVU	Hospice Care 0.5 billion RVU	Tw-DRGs 21 billion RVU	Commission Cases 2 billion RVU
Ward Fees 27.0%	Surgical Fees 62.8%	Ward Fees 19.8%	Therapeutic Procedure Fees 30.8%	Ward Fees 33.4%	Surgical Fees 35.1%	Ward Fees 26.4%
Drug Fees 15.8%	Therapeutic Procedure Fees 13.7%	Special Materials Fees 19.4%	Ward Fees 26.6%	Drug Fees 18.9%	Special Materials Fees 19.4%	Surgical Fees 15.0%
Laboratory Fees 9.5%	Anesthesia Fees 6.5%	Drug Fees 17.9%	Drug Fees 14.1%	Therapeutic Procedure Fees 17.4%	Ward Fees 11.1%	Tube Feeding Fees 12.2%
Therapeutic Procedure Fees 9.2%	Diagnosis Fees 4.9%	X-Ray Fees 10.8%	Diagnosis Fees 5.5%	Diagnosis Fees 10.4%	Anesthesia Fees 9.0%	Drug Fees 9.3%
Surgical Fees 8.6%	Ward Fees 4.7%	Therapeutic Procedure Fees 7.3%	Tube Feeding Fees 4.9%	X-Ray Fees 4.3%	Laboratory Fees 8.1%	Anesthesia Fees 7.3%

**c. Males had higher medical expenses than females. Ward fees were the highest expenses for both genders.**

Ward fees accounted for the largest proportion of the inpatient expenses in 2011, followed by drug fees and surgical fees. Inpatient expenses amounted to 96 billion RVU (55.2%) by males. Ward fees were the highest expenses, followed by drug fees and therapeutic procedure fees. Inpatient expenses amounted to 78 billion RVU (44.8%) by females. Ward fees were the highest expenses, followed by surgical fees and drug fees. The average expense per case was 57,497 RVU for males and 48,290 RVU for females.

Figure 49 Detailed Inpatient Medical Expenses by Gender



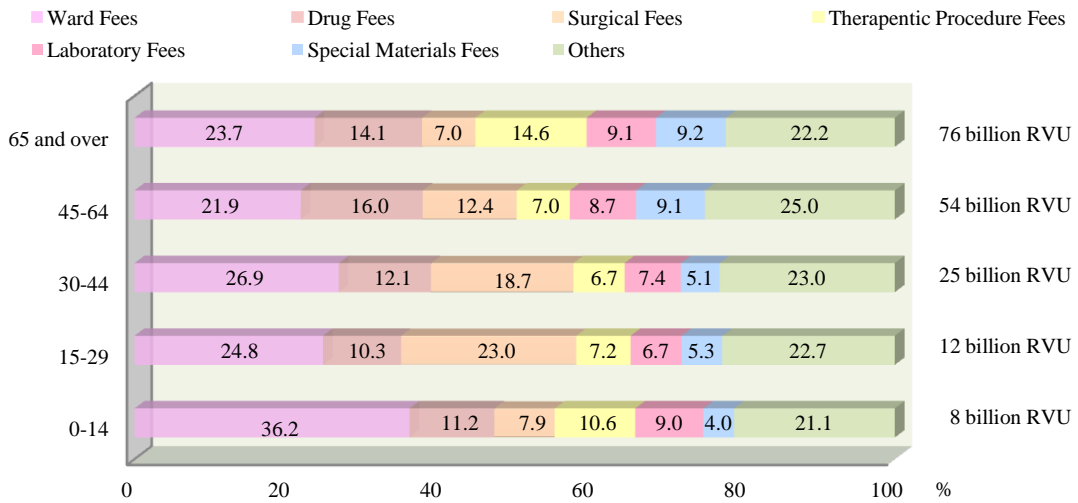
Inpatient medical expenses were 174 billion RVU , 96 billion RVU for male and 78 billion RVU for female.

**d. Ward fees accounted for the largest proportion in all age groups.**

In 2011, the total inpatient expenses for the age group of 0–14 amounted to 8 billion RVU. The highest expense was ward fees, followed by drug fees. For the group of 15–29, the total expenses were 12 billion RVU. Ward fees accounted for the largest portion of expenses and surgical fees the second. In the group of 30–44, the total expenses were 25 billion RVU. Ward fees accounted for the largest portion of expenses, followed by surgical fee. In the group of 45–64, the total expenses were 54 billion RVU. Ward fees also accounted for the largest portion of expenses and drug fees the second. The total expenses from the group of 65 and above amounted to 76 billion RVU. The highest percentage was from ward fees, followed by therapeutic procedure fees.

Figure 50 Detailed Inpatient Expenses by Age

2011



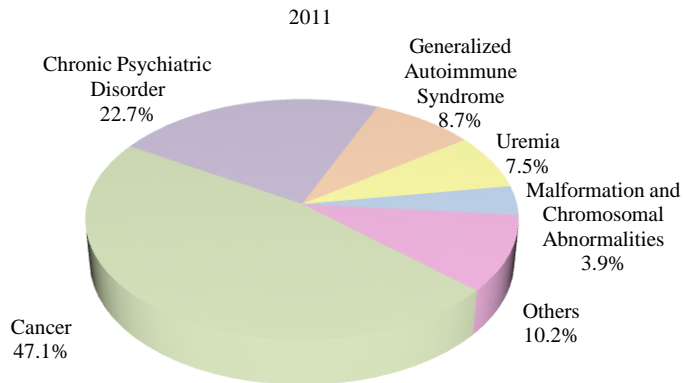
"Others" includes 10 other medical fees, such as diagnosis fees, X-Ray Fees and anesthesia fees.

#### (4) Medical Utilization for Major Illness/Injuries

**The number of valid Major Illness/Injury Certificates issued in 2011 increased by 90% from the end of 2001.**

As at the end of 2011, there were 30 major illness/injury categories. The number of valid Major Illness/Injury Certificates issued was 918,720, showing an increase of 47,263 or 5.4% from the end of the previous year. Cancer patients held the highest number at 432,344 (47.1%), followed by chronic psychiatric disorder patients at 208,432 (22.7%) and patients with generalized autoimmune syndrome requiring lifelong treatments at 79,672 (8.7%). The number of valid Major Illness/Injury Certificates issued showed an increase of 90.1% from the end of 2001. The average annual increase in ten years was 6.6%.

Figure 51 Numbers of Valid Major Illness/ Injury Certificates Issued



At the end of 2011, the number of valid Major Illness/ Injury Certificates issued was 918,720.

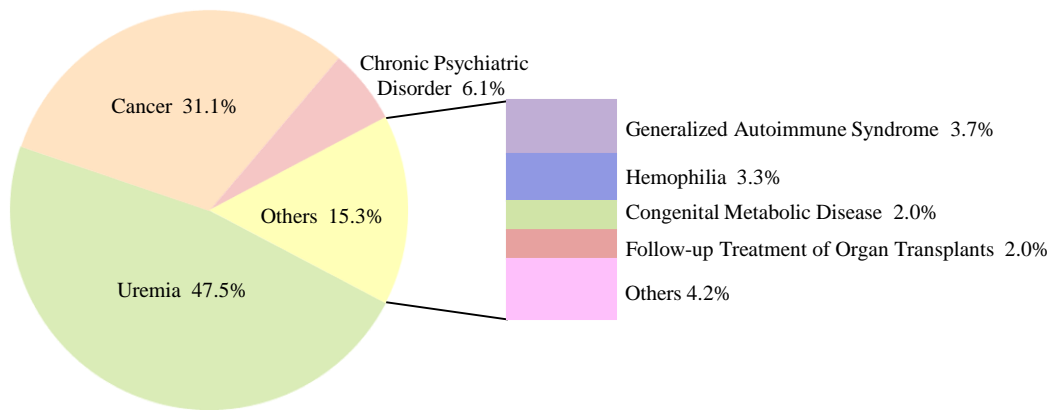
## i. Outpatient Service

### a. Uremia had the highest claim, which accounted for 47.5% of all.

Total outpatient claims for major illness/injury in 2011 amounted to 80 billion RVU, an increase of 5.5 billion RVU or 7.3% from the previous year. The average annual increase in ten years was 9.6%. The top three diseases were, respectively, uremia, cancer and chronic psychiatric disorders.

Figure 52 Outpatient Medical Benefit Claims of Major Illness/ Injury

2011



The outpatient medical benefit claims of major illnesses/ injury were 80 billion RVU in 2011.

### b. In terms of average medical claim per capita, congenital coagulation disorders (Hemophilia) ranked the highest.

With regard to the average outpatient claim per capita on major illness/injury in 2011, congenital coagulation disorders (Hemophilia) ranked the highest at 2,738,071 RVU, followed by Uremia at 534,236 RVU, organ transplants at 210,029 RVU, Severe Hemolytic and Hypoplastic Anemia at 191,038 RVU and Multiple Sclerosis at 174,218 RVU. The medical claims for these five diseases represented, respectively, 26.8, 5.2, 2.1, 1.9 and 1.7 times of the average value, 102,282 RVU.

Table 2 Top 10 Outpatient Major Illness/Injury in 2011

Medical Benefit Claims				Medical Benefit Claims Per Capita		
Rank	Category of Major Illness/Injury	million RVU	%	Category of Major Illness/Injury	RVU	Multiples
-	Total	79,976	100.0	Average RVU per capita	102.282	1.0
1	End-stage renal disease (Uremia)	38,006	47.5	Congenital coagulation disorder (Hemophilia)	2,738,071	26.8
2	Cancer	24,840	31.1	End- stage renal disease (Uremia)	534,236	5.2
3	Chronic psychiatric disorder	4,868	6.1	Organ transplants	210,029	2.1
4	Generalized autoimmune syndrome	2,985	3.7	Severe hemolytic and hypoplastic anemia	191,038	1.9
5	Congenital coagulation disorder (Hemophilia)	2,653	3.3	Multiple sclerosis	174,218	1.7
6	Organ transplants	1,618	2.0	Severe malnutrition	142,352	1.4
7	Congenital metabolic disease	1,607	2.0	Congenital metabolic disease	131,573	1.3
8	Dependence on respirator	614	0.8	Congenital immunodeficiency	129,196	1.3
9	Malformation and chromosomal abnormalities	409	0.5	Dependence on respirator	123,048	1.2
10	Cirrhosis of liver	379	0.5	Rare diseases	105,074	1.0

**c. Medical claims by males were slightly higher than those by females.**

In 2011, the total outpatient claims on major illness/injury filed by males amounted to 40 billion RVU, a 7.8% increase from the previous year. The claims from females amounted to 40 billion RVU, an increase of 6.9% from the previous year. Uremia accounted for the largest proportion of claims for both genders (45.5% and 49.6% respectively). Cancers requiring active or lifelong treatments ranked the second in both genders (31.0% and 31.2% respectively). Congenital coagulation disorders (Hemophilia) and autoimmune diseases ranked the third for male (6.5%) and for female (6.2%) respectively.

Table 3 Top 10 Outpatient Major Illness/Injury in 2011 by Gender

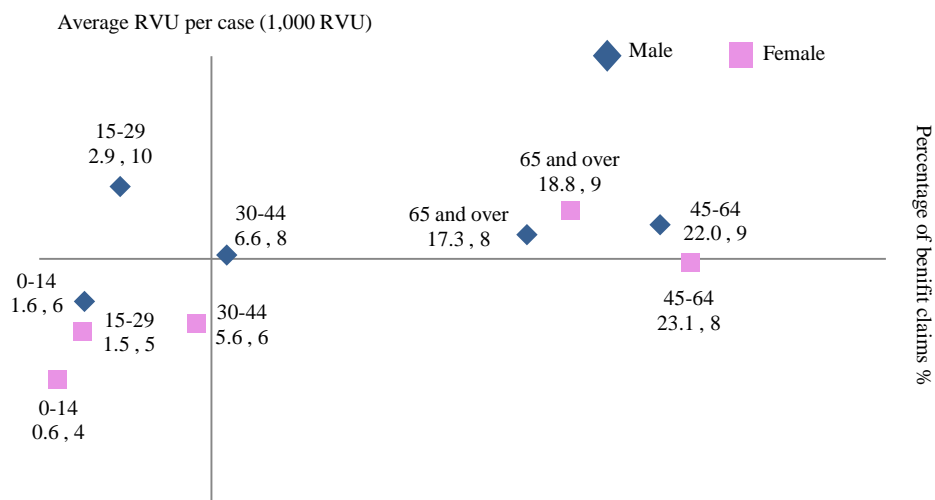
Male	%	Female	%
End-stage renal disease (Uremia)	45.5	End-stage renal disease (Uremia)	49.6
Cancer	31.0	Cancer	31.2
Congenital coagulation disorder (Hemophilia)	6.5	Generalized autoimmune syndrome	6.2
Chronic psychiatric disorder	6.1	Chronic psychiatric disorder	6.1
Organ transplants	2.6	Metabolic disorder	1.6
Congenital metabolic disease	2.5	Organ transplants	1.5
Generalized autoimmune syndrome	1.3	Dependence on respirator	0.7
Dependence on respirator	0.8	Malformation and chromosomal abnormalities	0.6
Cirrhosis of liver	0.7	Rare disease	0.5
Malformation and chromosomal abnormalities	0.5	Hemolytic disease	0.4

**d. The age group of 45–64 had the highest medical claims**

Broken down by age group, the outpatient claims of major illness/injury in 2011 were, respectively, 2 billion RVU (2.2%) for the 0–14 group, 4 billion RVU (4.4%) for the 15–29 group, 10 billion RVU (12.2%) for the 30–44 group, 36 billion RVU (45.1%) for the 45–64 group and 29 billion RVU (36.1%) for the group of 65 and above. For the age groups below 45, males had higher medical claim than females. For the age groups above 45, females had higher claim than males.

In terms of the average RVU per outpatient case of major illness/injury in 2011, females had higher claim amount than males in the age group of 65 and above while males had higher amount than females in all other age groups.

Figure 53 Outpatient Medical Benefit Claims of Major Illness/ Injury by Gender and Age



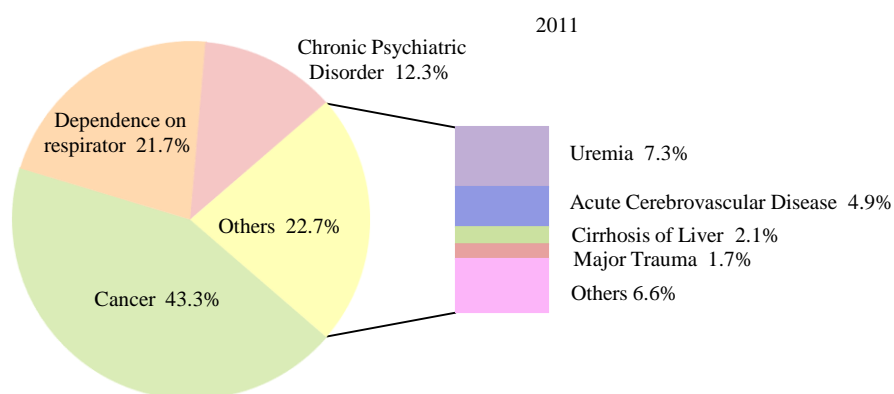
The X-Axis and Y-Axis values in the origin (6.1, 7.6) represented, respectively, "the median of the percentage of benefit claims" and "the median of the average RVU per case."

**ii. Inpatient Service**

**a. Cancer accounted for 43.3% of the total medical claims of major illness/ injury and was the highest of all.**

Total inpatient claims for major illness/injury in 2011 amounted to 70 billion RVU, an increase of 2 billion RVU or 3.3% from the previous year. The average annual increase in ten years was 7.2%. The top three diseases were, respectively, cancer, dependence on respirator and chronic psychiatric disorders.

Figure 54 Inpatient Medical Benefit Claims of Major Illness/ Injury



The inpatient medical benefit claims of major illnesses/ injury were 70 billion RVU in 2011.

**b. In terms of average medical claim per capita, congenital coagulation disorders (Hemophilia) ranked the highest.**

With regard to the average inpatient claim per capita for major illness/injury in 2011, congenital coagulation disorders (Hemophilia) had the highest amount of 1,592,866 RVU. It was followed by dependence on respirator s at 739,754 RVU, burns at 732,732 RVU, malnutrition at 558,882 RVU and complications in premature infants at 426,146 RVU. They were, respectively, 6.7, 3.1, 3.1, 2.3 and 1.8 times of the average amount, which was 238,522 RVU.

Table 4 Top 10 Inpatient Major Illness/Injury in 2011

Medical Benefit Claims				Medical Benefit Claims Per Capita		
Rank	Category of Major Illness/Injury	million RVU	%	Category of Major Illness/Injury	RVU	Multiples
-	Total	70,423	100.0	Average RVU per capita	238,522	1.0
1	Cancer	30,521	43.3	Congenital coagulation disorders (hemophilia)	1,592,866	6.7
2	Dependence on respirator	15,264	21.7	Dependence on respirator	739,754	3.1
3	Chronic psychiatric disorder	8,668	12.3	Burns	732,732	3.1
4	End-stage renal disease (Uremia)	5,162	7.3	Malnutrition	558,882	2.3
5	Acute cerebrovascular disease	3,449	4.9	Complications of premature infants	426,146	1.8
6	Cirrhosis of liver	1,504	2.1	Hemolytic disease	335,490	1.4
7	Major trauma	1,211	1.7	Motor neuron disease	330,069	1.4
8	Generalized Autoimmune Syndrome	998	1.4	Generalized Autoimmune Syndrome	300,880	1.3
9	Malformation and chromosomal abnormalities	878	1.2	Creutzfeldt Jakob disease	293,658	1.2
10	Organ transplants	607	0.9	Leprosy	273,823	1.1

**c. Medical claims by males were slightly higher than those by females.**

In 2011, the total inpatient claims on major illness/injury filed by males amounted to 40 billion RVU, a 3.6% increase from the previous year. The claims from females amounted to 30 billion RVU, an increase of 2.9% from the previous year. Cancer held the highest claims for both genders, respectively accounted for 44.7% and 41.5%. The claims filed by dependence on respirator ranked the second, respectively accounted for 20.9% and 22.7%. The third highest was the chronic psychiatric disorder, representing 11.9% and 12.9% respectively.

Table 5 Top 10 Inpatient Major Illness/Injury in 2011 by Gender

Male	%	Female	%
Cancer	44.7	Cancer	41.5
Dependence on respirator	20.9	Dependence on respirator	22.7
Chronic psychiatric disorder	11.9	Chronic psychiatric disorder	12.9
End-stage renal disease (Uremia)	6.2	End-stage renal disease (Uremia)	8.8
Acute cerebrovascular disease	5.0	Acute cerebrovascular disease	4.8
Cirrhosis of liver	2.7	Generalized autoimmune syndrome	2.6
Major trauma	2.2	Malformation and chromosomal abnormalities	1.4
Malformation and chromosomal abnormalities	1.1	Cirrhosis of liver	1.3
Organ transplants	1.1	Major trauma	1.1
Spinal injury or myeleterosis	0.7	Organ transplants	0.6

**d. The age group of 65 and above had the highest medical claims**

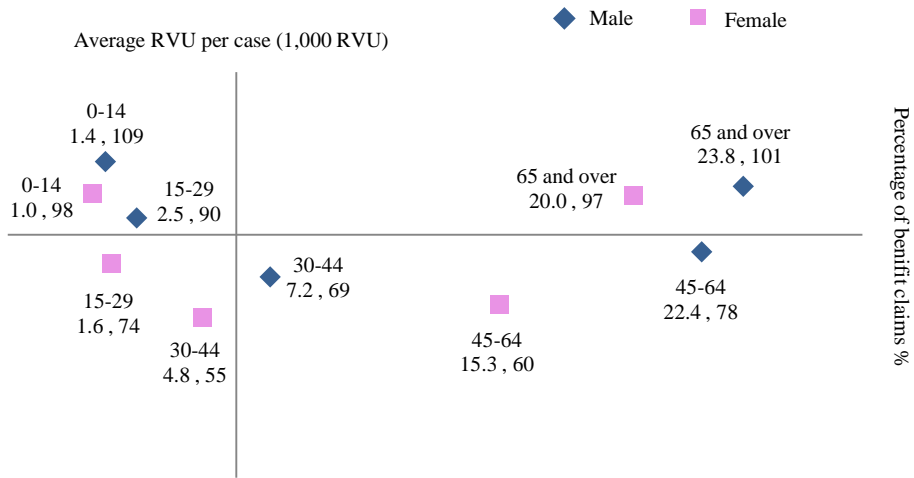
Broken down by age group, the claims of major illness/injury in 2011 were, respectively, 2 billion RVU (2.4%) for the 0–14 group, 3 billion RVU (4.2%) for the 15–29 group, 9 billion RVU (12.1%) for the 30–44 group, 27 billion RVU (37.6%) for the 45–64 group and 31 billion RVU (43.8%) for the group of 65 and above. Males had higher claim amount than females in all age groups.

In terms of the average RVU per case for major illness/injury in 2011, males had higher claims than females in all age groups.



Figure 55 Inpatient Medical Benefit Claims of Major Illness/ Injury by Gender and Age

2011



The X-Axis and Y-Axis values in the origin (6.0, 84) represented, respectively, "the median of the percentage of benefit claims" and "the median of the average RVU per case."

## (5) Medical Expense Copayments

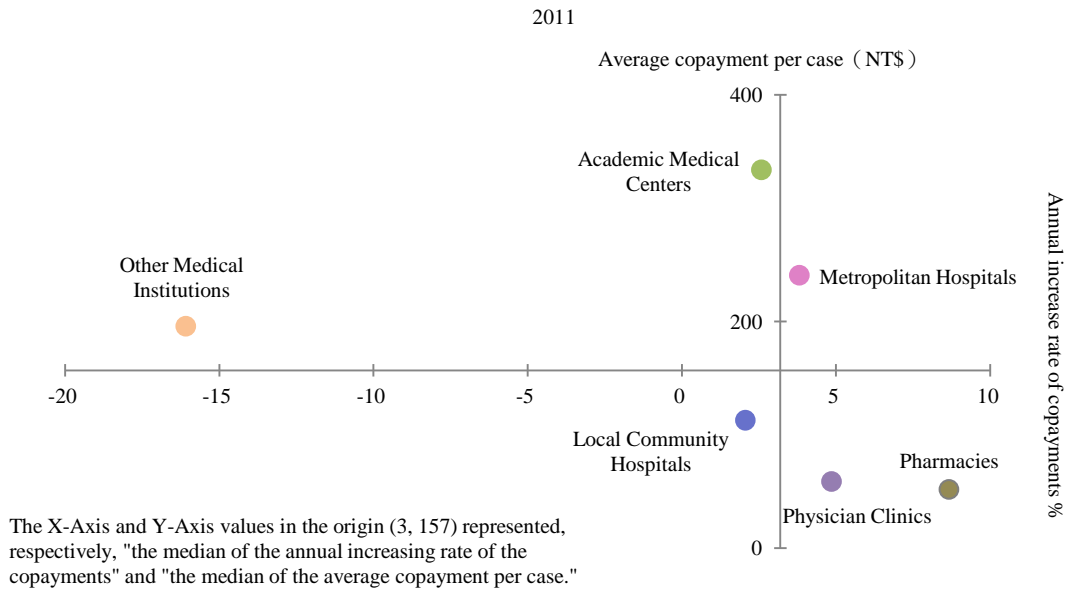
Medical expense copayments totaled NT\$36 billion in 2011, being 6.5% of the total medical expenses and a 3.6% increase from the previous year. Outpatient copayments amounted to NT\$29 billion, showing a 3.9% increase from the previous year. Inpatient copayments were NT\$7 billion, showing a 2.1% increase from the previous year.

### i. Outpatient Service

#### a. The highest copayment was seen from beneficiaries visiting physician clinics.

Beneficiaries visiting physician clinics accounted for the largest proportion of outpatient copayments in 2011, being 47.4% of all and a 4.9% increase from the previous year. This was followed by metropolitan hospitals (23.4%), a 3.8% increase from the previous year, and academic medical centers (20.0%), a 2.6% increase from the previous year. In terms of average copayment per case, academic medical centers had the highest amount of NT\$334, followed by metropolitan hospitals at NT\$241 and other medical institutions at NT\$196.

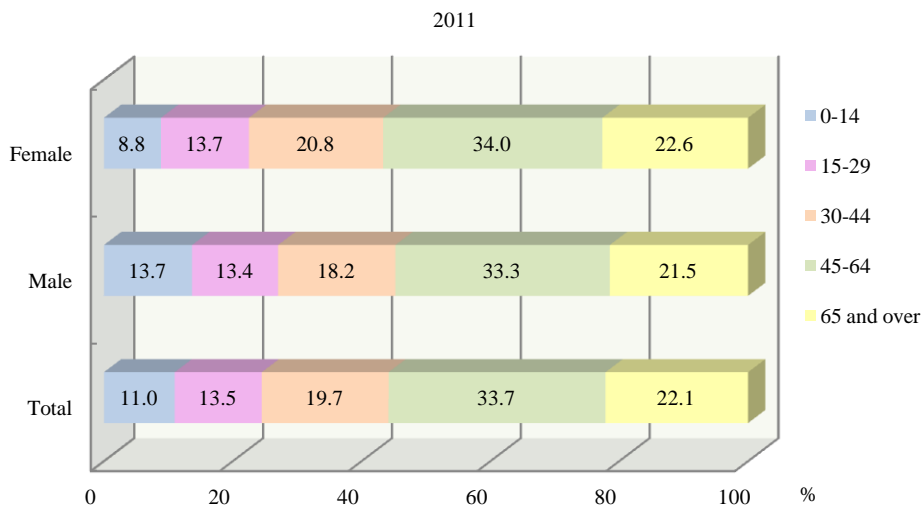
Figure 56 Outpatient Copayment



**b. Females had higher copayments than males.**

In 2011, outpatient copayments filed by males amounted to NT\$13 billion or 44.1% of all. Females had NT\$16 billion or 55.9%. With regard to age group, the group of 45–64 had the highest copayment for both males and females, followed by the group of 65 and above and the group of 30–44. The group of 0–14 had the lowest copayment amount.

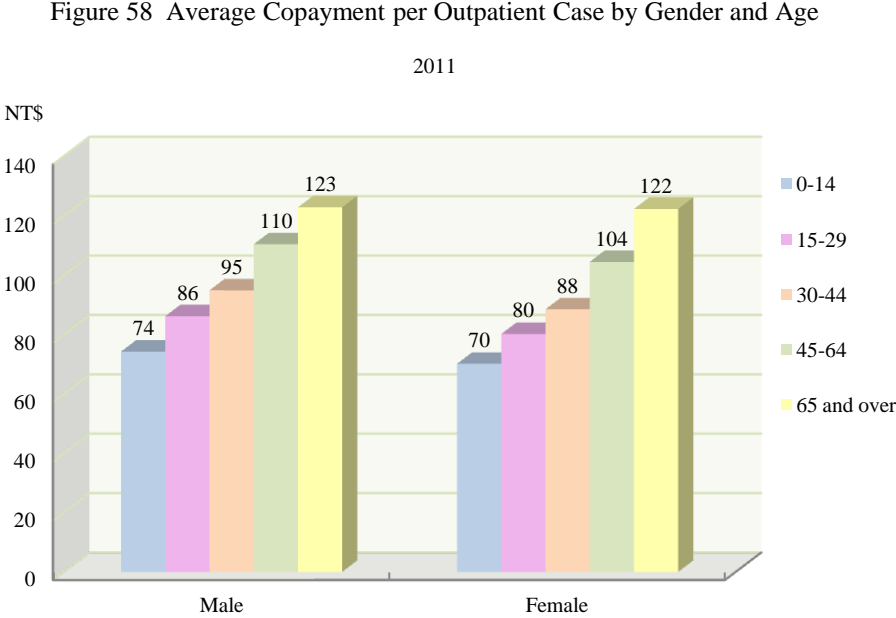
Figure 57 Outpatient Copayment by Gender and Age



The outpatient copayments were NT\$13 billion for male and NT\$16 billion for female in 2011.

**c. The average copayment per case increased with age.**

The average outpatient copayment per case increased with age. Males showed higher amount than females in all age groups.

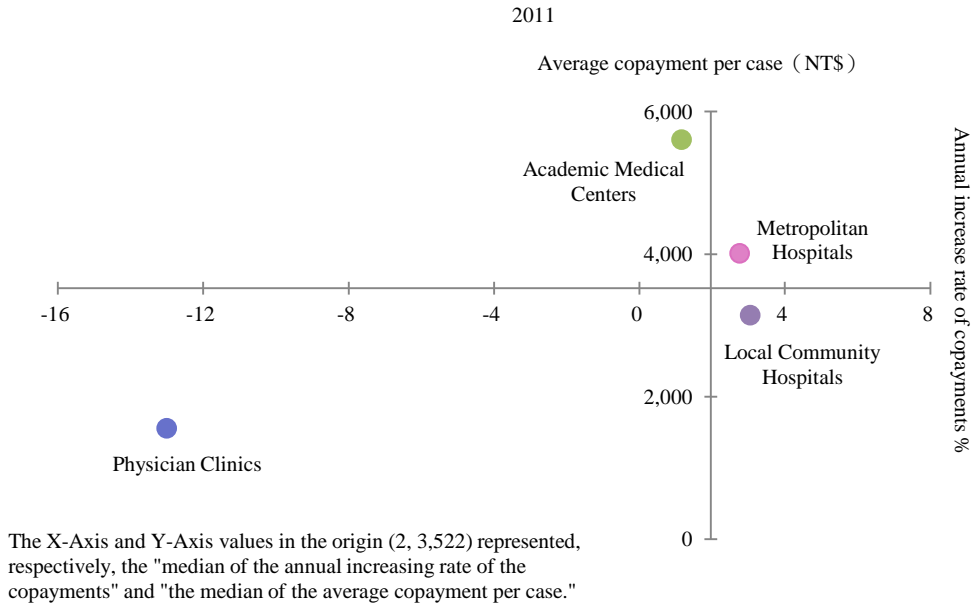


**ii. Inpatient Service**

**a. The highest copayment was seen from beneficiaries visiting metropolitan hospitals.**

Beneficiaries visiting metropolitan hospitals accounted for the largest proportion of inpatient copayments in 2011, being 45.8% of all and a 2.8% increase from the previous year. Academic medical centers, which ranked the second, accounted for 40.7% of all and marked an increase of 1.2% from the previous year. Local community hospitals ranked the third, being 13.4% of all and marked an increase of 3.0% from the previous year. In terms of the average copayment per inpatient case, academic medical centers had the highest expense of NT\$5,606, which was followed by metropolitan hospitals at NT\$4,010 and local community hospitals at NT\$3,142.

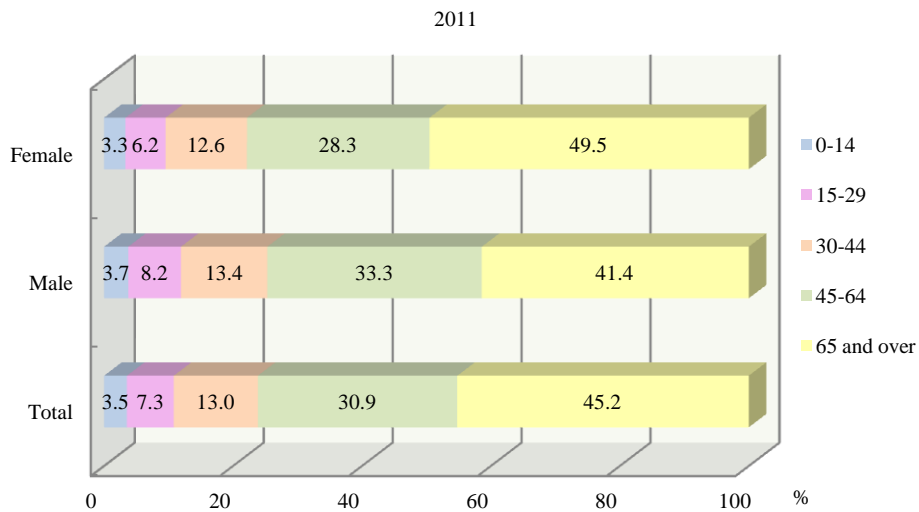
Figure 59 Inpatient Copayment



**b. Males had higher copayment amount than females.**

In 2011, inpatient copayments filed by males amounted to NT\$4 billion or 53.2% of all. Females had NT\$3 billion or 46.8%. With regard to age group, the group of 65 and above had the highest copayment for both males and females, followed by the group of 45–64 and the group of 30–44. The group of 0–14 had the lowest copayment amount.

Figure 60 Inpatient Copayment by Gender and Age

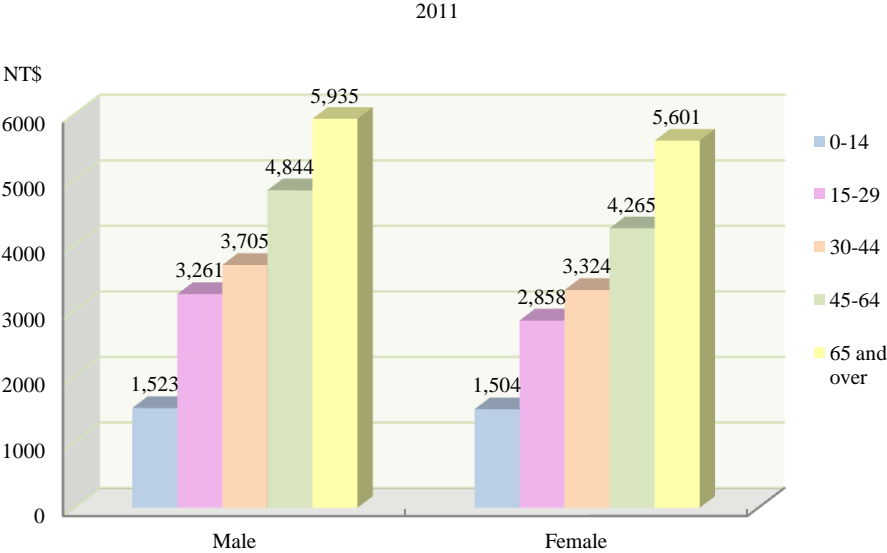


The inpatient copayments were NT\$4 billion for male and NT\$3 billion for female in 2011.

**c. The average copayment per case increased with age.**

In 2011, the average copayment per case increased with age. Males showed higher amount than females in all age groups.

Figure 61 Average Copayment per Inpatient Case by Gender and Age



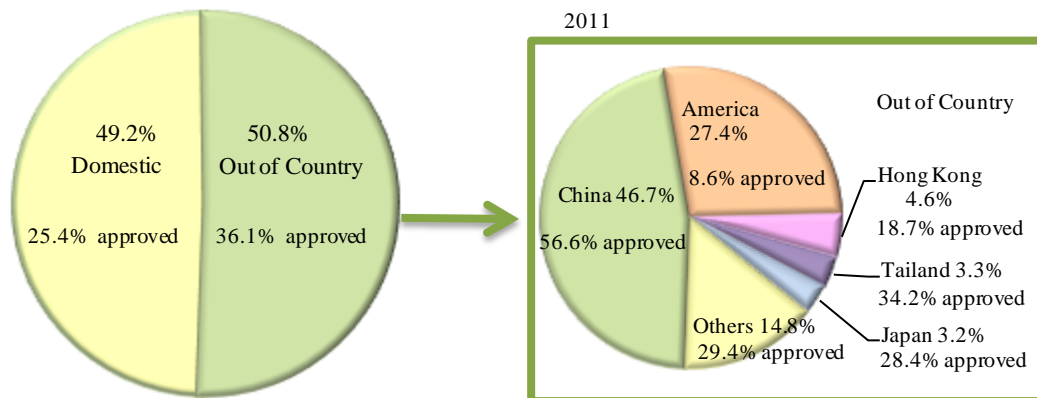
**(6) Reimbursement of Advanced Medical Expenses for Out-of-Plan Services**

**i. Domestic and overseas claims were close in terms of claimed amount. Overseas claims, however, showed a higher approval rate.**

The total advanced medical expense claims for out-of-plan services approved were NT\$2 billion in 2011, an increase of 6.9% from the previous year. The total approved amount was NT\$510 million, an increase of 2.6% from the previous year. The approval rate was 30.8%.

Broken down by area, domestic claims accounted for NT\$820 million or 49.2% of all, showing an increase of 7.7% from the previous year. The approval rate was 25.4%. Overseas claims amounted to NT\$840 million, accounted for 50.8% of the total claims and showed an increase of 6.1% from the previous year. The approval rate was 36.1%. Advanced medical expenses for services rendered in China amounted to NT\$390 million and represents 46.7% of all overseas claims, being the highest of all. The approval rate was 56.6%. The claims for services rendered in the United States amounted to NT\$230 million and contributed to 27.4% of the total overseas claims, being the second highest. The approval rate was 8.6%.

Figure 62 Reimbursement of Advance Medical Expenses for Out-of-Plan Services



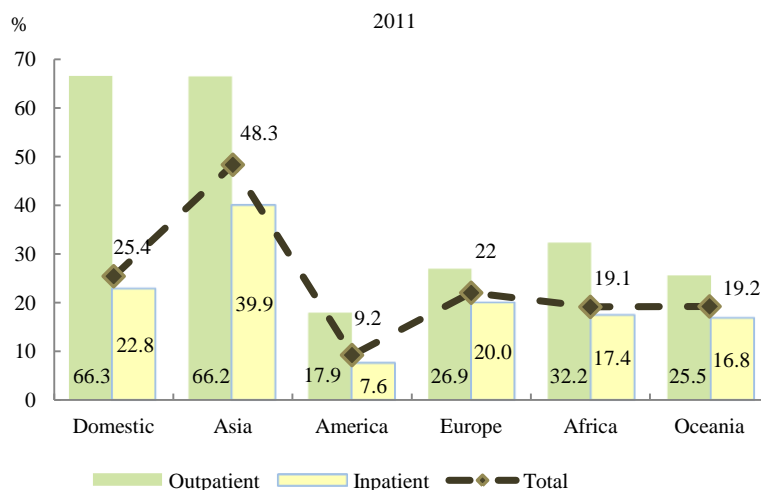
A total of NT\$2 billion was filed in 2011, 30.8% was approved.

**ii. Domestic claims had a higher approval rate for outpatient services; whilst overseas claims showed a higher approval rate for inpatient services.**

In 2011, the total outpatient advanced expense claims for out-of-plan services approved amounted to NT\$280 million, showing a 0.4% increase from the previous year. The approval rate was 58.7%, 66.3% for domestic claims and 57.0% for overseas claims. For overseas claims, the highest approval rate was seen from Asia, being 66.2%, followed by Africa at 32.2% and North America at 17.9%.

The total inpatient claims for out-of-plan services approved amounted to NT\$1 billion, an increase of 8.3% from the previous year. The approval rate was 25.3%, 22.8% for domestic claims and 28.4% for overseas claims. For overseas claims, the highest approval rate was seen from Asia, being 39.9%, followed by Europe at 20.0% and the North America at 7.6%.

Figure 63 Approval Rates for reimbursements for Out-of-Plan Service



Notes:

1. Data in this chapter was last updated on June 30, 2012.
2. The medical benefit claims in this chapter do not include copayments.
3. The detailed medical expenses in this chapter include the medical benefit claims and copayments.
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.